County Borough of Wolverhampton.

REPORT

UPON THE

Health of Wolverhampton

FOR THE YEAR 1904,

BY

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MEDICAL OFFICER'S REPORT,

1904.

PREVALENCE AND PREVENTION OF INFECTIOUS DISEASE.

Table 2 gives the weekly numbers of cases of certain diseases certified by Medical Men under the Infectious Diseases Notification Act. The crosses represent the degree to which the disease heading those columns prevailed—these are only rough approximations. Any certificate detected as erroneous before the close of the week is not entered.

Table 1 gives the total number of cases about which enquiries were made and which were recorded; no erroneous cases are entered in this Table.

Small Pox.—The last case of Small Pox in 1903 was discharged from the Borough Hospital on September 4th; we remained free until May 2nd this year, when a case was reported from the temporary Union Dispensary in Clarence Street. It was an un-vaccinated vagrant lad, aged 16, who had fallen ill at Stafford, and actually walked from there the previous night; fortunately he arrived at the Dispensary after the other patients had left, so was in contact with no one. He was removed to the Borough Hospital. The case was fairly mild.

About the middle of May Small Pox was introduced from some unknown source into a family in the East, consisting of parents and three children, two of the latter being un-vaccinated; the mother, who was going about and would therefore be more exposed to infection, was first attacked, then her husband, but both in so modified a form that they were not recognised until the un vaccinated children were taken ill with evident Small Pox, the only one in the household escaping infection being the

vaccinated child. By this time also the first patient's mother, who lived a little way off, but had been daily attending on her daughter, was taken ill. All these cases were mild, with the exception of one of the un-vaccinated children. They were all removed to the Borough Hospital. Careful enquiries were made as to the other residents at the last house, one child was found un-vaccinated and was at once vaccinated. Three days after we heard that a daughter of the last case (of whom we had not been told) was in service at a public house in the West Sub-district, and had spots on her; on calling we found this was undoubtedly a very mild case of Small Pox, she had not complained of any illness, and had only a few pocks on the whole body. She had been well vaccinated in infancy, and being only 16 years old was still partially protected. She was at once removed to the Borough Hospital. There were in this house, father vaccinated in 1878, mother and two children vaccinated in infancy, and five un-vaccinated children. All vaccination was, in spite of urgent entreaty, refused. Eight days after the mother, and the day after that two of the un-vaccinated children, were taken ill. All were removed to the Borough Hospital, and the premises closed for a fortnight. The mother and the eldest child had very mild attacks, the youngest child was rather more severe but eventually did very well. Shortly after the above-mentioned cases from the East had been removed a doctor reported another case some distance from them. This was a woman intimate with the first case taken, and who had called to enquire about her; she had the mildest possible attack (vaccinated in infancy, aged 29 years), and was at first supposed to be Chicken Pox; on account of this suspicion her two children were sent away at once. On her doctor hearing of the other cases his suspicions were aroused, and he reported the case. It was undoubtedly a trivial case of Small Pox, being practically over we did not remove it, but disinfected the premises and bedding. On looking up the children we found they were un-vaccinated, and had them vaccinated before their return home. We had no further case. Small Pox, like Measles and Scarlet Fever, is at times epidemic, at other times not; at the latter periods the cases are comparatively mild and infection comparatively feeble. The mildness of all the cases in this little outbreak shows that the period was not an epidemic one with us, and I feel confident that the remarkable limitation of the outbreak was due to this fact.

The following are the particulars as regards vaccination and illness:—

Number and Initials.	Sex and Age.	Vaccination.	Illness.
East.			
1 M. T.	F. 27	Infancy. 4 marks, total area $\frac{3}{4}$ square inch	Moderately severe case, severe onset, copious discrete eruption, slight suppuration. Total duration about 5 weeks
2 J. E. T.	M. 28	Infancy. 2 marks, total area $\frac{3}{4}$ square inch	Very mild case, a few scattered pocks. Total duration about 3 weeks
3 G. M. T.	F. 7	Un-vaccinated.	Mild case, discrete, fairly numerous pocks, slight suppuration. 18 days' duration
4 E. T.	F. 5	Un-vaccinated	Rather severe, very severe onset, semi-confluent eruption, moderate suppuration. 34 days duration
5 E. T.	F. 49	Infancy. 2 marks, one distinct $\frac{1}{4}$ square inch, one obscure $\frac{3}{16}$ square inch	Very mild case, rather severe onset but rapid subsidence of symptoms. 24 days duration
6 A. R.	F. 29	Infancy. 4 well-foveated marks	Very mild case, sharp onset but no subsequent illness, a few scattered pocks. About 20 days duration.
West.			
1—E. M.	M. 16	Un-vaccinated	Very mild case, numerous discrete pocks, slight suppuration. 30 days duration
2—C. T.	F. 16	Infancy. 3 marks. Total area $1\frac{1}{4}$ square inch	Trivial case, no illness, a very few scattered pocks. Duration about 25 days.
3—M. McL.	F. 41	Infancy. 3 marks. Area $1\frac{1}{3}$ square inch	Very mild case, severe onset but rapid subsidence, scattered pocks, very little suppuration. 20 days duration
4—A. McL.	M. 7	Un-vaccinated	Very mild case, scattered pocks, little suppuration. 20 days duration
5—E. McL.	M. 5	Un-vaccinated	Rather severe case, numerous pocks, semi-confluent on face, little suppuration, and rapid recovery. 25 days duration

Measles.—The quarterly cases of, and deaths registered as due to, Measles since 1884 are as follows :—

	1884.				1885.				1886.			
Cases	272	710	143	2	4	2	—	17	21	9	189	959
Deaths	11	66	20	1	1	—	—	—	—	—	8	103
	1887.				1888.				1889.			
Cases	124	17	31	22	119	149	166	435	150	228	78	141
Deaths	19	4	7	1	9	6	5	19	10	11	11	8
	1890.				1891.				1892.			
Cases	68	45	139	230	73	4	11	275	501	415	82	33
Deaths	3	10	5	14	5	—	—	20	21	16	3	1
	1893.				1894.				1895.			
Cases	21	18	106	248	530	294	15	4	2	83	215	549
Deaths	6	—	5	10	46	27	—	—	—	—	7	33
	1896.				1897.				1898.			
Cases	159	69	36	45	83	218	249	400	98	64	19	3
Deaths	6	—	1	1	3	11	16	19	4	10	5	—
	1899.				1900.				1901.			
Cases	3	1	3	55	974	549	84	198	310	541	184	195
Deaths	1	—	1	—	38	32	2	4	16	15	10	7
	1902.				1903.				1904.			
Cases	162	131	7	39	323	340	86	82	79	177	38	42
Deaths	7	7	1	6	14	32	7	3	—	—	—	—

We have no definite system of reporting Measles, and the great majority of our cases are seen by no doctor, hence there is some uncertainty about our cases, and the recorded numbers are only rough approximations. Our only definite source of information is from the reports of absentees sent by the teachers in the various public schools, which are inquired into by our own Inspectors ; these reports are frequently irregular, unless some school attendance is seriously affected.

At the close of 1903 there had been an outbreak of Measles in the area lying between Green Lane and Bilston Road, and this continued in some degree during the first quarter of the present year. During the second quarter there was an increase in the total number of cases, but they were scattered, and evidently non-epidemic. During the latter half of the year only a few scattered cases were heard of. We had no deaths from Measles during the year.

Scarlet Fever.—We began recording our cases in 1884, but as we have only had notifications since 1890 (inclusive) the returns before that year are less complete than those since. The death records in my possession go back to 1870 ; the following are the deaths since that year, and the known cases since 1884 :—

	1870.	1871.	1872.	1873.	1874.	1875.	1876.
Deaths	54	26	69	121	34	26	58
	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Deaths	226	40	17	39	64	27	24
	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Deaths	37	46	5	16	17	6	13
Cases	212	244	47	168	194	124	500
	1891.	1892.	1893.	1894.	1895.	1896.	1897.
Deaths	14	3	25	55	34	21	24
Cases	419	242	623	1096	592	372	529
	1898.	1899.	1900.	1901.	1902.	1903.	1904.
Deaths	20	6	9	10	15	14	14
Cases	359	177	242	408	549	550	477

The fatality varies in different periods, so that the deaths bear little ratio to the cases. During the present year the prevalence has been rather low, and the mortality, 2·93 per cent. of the cases, moderate, though higher than during the previous three years.

The following table gives quarterly particulars as to the cases in the two Sub-districts. The case in the General Hospital was not sent in by us. The deaths are those of the cases reported in each quarter, and sometimes occur later; excepting Table No. 2, they do not necessarily correspond to the deaths in the Mortality Tables, which are those registered in each quarter :—

	Quarters		1st	2nd	3rd	4th	Year
EAST ..	Total	Cases ..	60	35	35	56	186
		Deaths ..	5	2	1	1	9
	Borough Hospital	Cases ..	52	29	34	51	166
		Deaths ..	2	1	1	1	5
	General Hospital	Cases ..	..	1	..	..	1
		Deaths ..	..	..	..	..	..
	At Home	Cases ..	8	5	1	5	19
		Deaths ..	3	1	..	..	4

Quarters.			1st	2nd	3rd	4th	Year.
WEST ..	Total	Cases ..	68	73	75	75	291
		Deaths ..	..	3	..	2	5
	Borough Hospital	Cases ..	50	61	57	58	226
		Deaths ..	..	3	..	2	5
	General Hospital	Cases ..	..	..	..	..	..
		Deaths ...	..	..	..	..	..
	At Home	Cases ..	18	12	18	17	65
		Deaths ..	..	..	..	..	..

The mortality per cent. of the cases treated at home is 4·76, that of those treated in the Borough Hospital is 2·55.

We almost always have a higher mortality in the East than in the West; this year the East is 4·84 per cent. of the cases, the West only 1·72; the latter is a very low mortality. The prevalence in the West has really been low, and fairly uniform throughout the year. In the East the prevalence was very low during the second and third quarters, moderately low during the first and fourth. The prevalence is usually greater during the winter quarters, and this year is largely contributed to by a local outbreak in each quarter; in the first a number of cases occurred without apparent explanation, until, through a letter of complaint from a neighbour, a child was detected going about while peeling freely. In the fourth quarter a similarly overlooked case infected his father, all his brothers and sisters, and many neighbouring children before he was detected. We found six different cases of scarlet fever had a common milk supply from a house outside the Borough. On inquiry we learned that two cases of the fever were being treated in this house. A child was taken ill with indefinite symptoms at a house where there was a children's party, and was allowed to lie on a sofa during the party; next day the illness proved to be Scarlet Fever, and subsequently three of the visitors at the party had Scarlet Fever. In one instance the mother of a case being treated at home, and nursed by her, took the fever; in another similar case the woman nursing the child took the fever. But it is not only from cases kept at home in the Borough that we are exposed to danger. A case of Scarlet Fever occurred in one house just after a visit from a friend, who had a case at her home in a neighbouring town. The son of a family here got Scarlet Fever in a neighbouring town where there is no hospital

isolation; his mother nursed him for a time, then returned home, one of her daughters taking her place, then two of her children here were taken ill. When there is an extensive prevalence of Scarlet Fever, and many possible sources of infection, we cannot confidently conclude as to any particular source; but this year the prevalence was so little that we are quite justified in attributing the infection to the discovered source.

On account of the larger size of many of the houses in the West a greater number of cases in this Sub-district have fair facility for home isolation; hence the greater proportion of cases so treated there. The following table gives the proportion of cases kept at home in the Sub-districts since 1884. I give the total deaths registered also, because the cases were imperfectly reported before 1890. Column 'R' is the rate of the total cases per 10,000 of population.

	EAST.				WEST			
	Total Deaths.	Cases.	R.	Cases at home	Total Deaths.	Cases.	R.	Cases at home
1884	28	140	36·1	?	9	72	18·4	?
1885	37	146	37·6	78	9	98	24·6	70
1886	2	19	4·9	4	3	28	6·9	19
1887	5	52	13·4	25	11	116	28·2	82
1888	5	53	13·5	27	12	141	33·8	56
1889	0	45	11·5	16	5	79	18·6	29
1890	5	239	61·3	61	8	261	60·6	100
1891	7	154	39·4	28	7	265	60·4	74
1892	2	76	19·4	19	1	166	37·1	50
1893	17	301	76·6	20	8	322	70·4	47
1894	39	600	152·1	53	16	496	106·1	104
1895	16	234	59·2	28	18	358	75·0	98
1896	10	155	39·1	20	11	217	44-5	55
1897	11	219	55·0	37	15	310	62·3	77
1898	5	124	31·1	12	15	235	46·2	57
1899	4	52	13·0	6	2	125	24·1	33
1900	3	93	23·1	5	6	149	28·1	51
1901	5	131	32·5	21	5	277	51·1	75
1902	7	189	46·7	13	8	360	65·0	102
1903	8	237	58·3	31	6	313	55·3	76
1904	9	186	45·8	19	5	291	50·2	65

These figures are most instructive, but for full comment on them I must refer to page 10 of the 1903 report; here I will only repeat that the facts apparently indicate that in spite of the greater facilities which exist for the extension of Scarlet Fever in the East, the fairly complete Hospital isolation attained there renders that Sub-district during ordinary years less affected than the West; but this protection fails when a more epidemic prevalence exposes the poorer and more crowded Sub-district to the danger of overlooked cases spreading infection; at a time, too, when the unknown epidemic conditions which favour infection are present. At the same time, it is not improbable that the normal prevalence of Scarlet Fever may, in consequence of some conditions at present unknown, be really greater in the West than in the East.

The following is the summary of the apparent effects of removal and home care on the spread of the infection in the households attacked during the year. No account is taken of houses where there is no susceptible child after the first case attacked; children who have already had Scarlet Fevere being counted as insusceptible :—

East Sub-District.—During the year there were 92 instances in which no second case occurred after the removal to the Hospital of first cases. In these 92 houses there remained 243 children who had not previously had Scarlet Fever.

In 5 instances secondary cases occurred without Hospital removal, there were 11 such cases; they occurred at the following intervals after the previous case was taken ill :—1 case each after two, three, four, five, and six days; seven days, 3 cases; ten days, 2 cases; thirteen days, 1 case.

In most of these Hospital removal was ultimately effected, and in four instances where four susceptible children still remained there was no further recurrence.

Thus in 96 instances there was no further case after Hospital removal, though 247 children remained in these houses.

In 9 instances further cases occurred *after* Hospital removal, there were 9 such cases at the following intervals after the removal :—one, three, six, eleven, and twelve days, 1 case each ; fourteen days, 2 cases ; fifteen and twenty-three days, 1 case each. In these houses 13 children still remained unaffected, so that in all 260 children escaped infection in 105 houses after Hospital removal.

In the East, cases were isolated at home in 13 houses. In some of these there were either no other children, or such were at once sent away ; in two instances the case died in a few days. In 7 houses isolation was continued, 12 other children being in these houses ; in only one instance did infection extend ; 2 children being attached at intervals of four and eleven days.

West Sub-District.—There were 111 instances in which the first cases of Scarlet Fever were removed, and no others occurred. In these 111 houses there remained 246 susceptible children.

In 16 instances secondary cases occurred without Hospital removal ; there were 19 such cases ; they occurred at the following intervals after the preceding case had been taken ill :—One day, 5 cases ; two days, 6 cases : three, five, seven, twelve, thirteen, nineteen, twenty-one, and forty days, 1 case each.

In some of these houses hospital removal was ultimately effected. In seven instances where there were susceptible children there was no further recurrence, 14 children escaping.

Thus, in 118 houses there was no recurrence after hospital removal, 260 children escaping.

In sixteen houses cases occurred *after* hospital removal, 19 cases occurring at the following intervals after the previous removal :—One day, 4 cases ; three, five, six, and seven days, 1 case each ; nine, and eleven days, 2 cases each ; twelve days, 1 case ; seventeen days, 2 cases ; twenty-seven, thirty-one, and thirty-four days, 1 case each. In these houses 22 children still remained unaffected ; so that in all 282 children in 134 houses escaped infection after Hospital removal.

In the West, cases were treated at home in 53 houses. In 18 there were no other susceptible children; but in one of these the nurse was taken ill 21 days after the child. In 13 instances the other children were sent away, in one of these the mother was taken ill seven days after the child. In 22 houses cases were treated where other susceptible children were kept at home; there were 33 such children in these houses. In only six houses fresh cases occurred, one in each house; the intervals after the first attack were:—five, seven, twelve, nineteen, twenty-one, and forty days. This record of home isolation is very good, almost as good as last year's; as then, it is in great part due to the very roomy houses in which most of the cases were treated. In one case, where a child was being treated, a child next door had Scarlet Fever ten days later. In another case the patient was allowed about as free from infection after 44 days illness, and played with a neighbour's child, who had Scarlet Fever 6 days after.

The summary for the Borough is as follows:—Hospital removal was effected in 239 houses. After the first removals there remained in these houses 570 children. In 214 of these houses there was no recurrence after removal, 507 children escaping. In 25 houses there was recurrence, 28 children being attacked. In these twenty-five houses 35 children still escaped after final hospital removals. Of the 28 secondary cases 7 were ill within three days of the previous removal, and probably infected before it; 5 were more than three weeks after the removal, and probably due to independent infection. This leaves only 16 cases, possibly due to failure of Hospital removal; or to speak more correctly, due to failure to secure complete disinfection.

Cases were treated at home with reasonable facility for isolation in 29 houses, where there were 45 children besides the primary cases. Secondary cases occurred in 7 of these houses, 8 occurring. One of these cases was ill within four days of the primary attack, and therefore probably infected before any care was taken. Thus, 7 cases were probably due to failure.

The following tabular statement shows the results at a glance :—

	Hospital Removal.	Home Isolation.
Total houses	239	29
Cases recurred in	25	7
Number of children after primary cases ..	570	45
Number subsequently attacked ..	.. 28, or 4·9 %	8, or 17·8 %
Number possibly due to failure ..	.. 16, or 2.8 %	7, or 15·5 %
Number of children escaping ..	..542, or 95·1 %	37, or 82.2 %

The following is the total for the eleven years, 1894 1904 :—

	Hospital.	Home.
Total houses	2,515	322
Cases recurred in	254	120
Number of children after primary cases ..	6,800	627
Number of these attacked ..	.. 320, or 4·7 %	166, or 26·5 %
Number possibly due to failure ..	.. 153, or 2·3 %	114, or 18·2 %
Number of children escaping ..	..6,480, or 95·3 %	461, or 73·5 %

The cases treated at home were, of course, in roomy houses, where isolation was possible; those removed to the hospital include a great majority from small and comparatively crowded houses; thus, the evidently greater protection afforded the latter is very striking. There is, however, one correction which should be made in estimating the amount of protection which hospital removal affords the children left in the houses. In some instances, after the return home of a hospital case fresh cases occur.

This year we were fortunate in only having 23 such cases; of these 2 were adults, and 7 were children in other houses, and none of these are included in the figures we are now considering. If we add the remaining 14 cases to our 16 failures we have 30 cases due to hospital failure out of 570 children this year, or 5·3 %, compared with 15·5 % in the home cases. During the past eleven years we have 201 of these return cases; if we add these to the 153 cases due to failure we have 354, or 5·2 %, compared with 18·2 % in the cases treated at home.

Diphtheria.—The quarterly cases of, and deaths from, Diphtheria in the borough since 1890 have been :—

	1890				1891				1892			
Cases ..	11	3	4	5	8	8	6	11	1	7	4	4
Deaths ..	3	—	—	1	1	2	1	1	—	3	1	—
	1893				1894				1895			
Cases ..	7	5	12	11	11	16	33	22	34	78	56	140
Deaths ..	—	1	1	3	5	8	10	10	19	24	14	27
	1896				1897				1898			
Cases ..	108	101	87	64	73	72	75	91	61	25	64	52
Deaths ..	19	15	9	12	11	10	11	26	19	5	11	8
	1899				1900				1901			
Cases ..	29	20	29	27	24	15	32	24	24	21	22	39
Deaths ..	5	4	5	7	3	3	4	—	2	2	3	6
	1902				1903				1904			
Cases ..	15	33	21	22	6	13	13	14	11	9	14	44
Deaths ..	3	6	3	6	2	4	1	3	2	1	3	12

The annual cases and deaths in the Sub-districts have been :—

		1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898	1899.
East	Cases	11	8	3	14	36	88	114	121	76	37
	Deaths	2	1	2	2	20	29	21	21	18	12
West	Cases	12	25	13	21	46	220	246	190	126	68
	Deaths	2	4	2	3	13	55	34	37	25	9

		1900.	1901.	1902.	1903.	1904.
East	Cases	35	30	36	9	23
	Deaths	4	7	12	2	7
West	Cases	60	76	55	37	55
	Deaths	6	6	6	8	11

Each year makes it more evident that our case returns hardly at all represent the actual prevalence of Diphtheria, many mild cases having no medical attendance, and being altogether overlooked, and some cases reported as Diphtheria being other forms of severe sore throat. It is a matter for much regret that the facilities afforded for bacteriological research are so little taken advantage of. The fact that many mild cases are overlooked is very serious, for such cases are the unrecognised conveyers of infection, and explain the difficulty of tracing the source of infection in the reported cases. As far as could be judged we were apparently very free from Diphtheria until the close of the third quarter, when the cases were rather more numerous; during the fourth quarter there was a marked increase, causing at one time considerable anxiety and a high fatality.

East.—During the first quarter only four cases were heard of, two were in one house, another case was taken to the General Hospital and died the same day, the fourth case came here ill from a distance. In the second quarter, again, only four cases were reported, one was a nurse in the General Hospital. In the third quarter only three cases were reported, one was a nurse in the Borough Hospital; one case was fatal, an adult, apparently infected outside the Borough. During the fourth quarter twelve cases were reported, apparently separate; five of these cases were fatal, proving the actual prevalence must have been far beyond the known cases.

West.—Seven cases were reported in the first quarter, one was very doubtful; two were in one house, and one of these was fatal. In the second quarter only five cases were reported, all were apparently separate; one was fatal. In the third quarter only eleven case were reported, but mostly towards the close; two cases were fatal, aged 8 months and 3 years. This increase continued in the fourth quarter, with an alarming fatality; thirty-two cases were reported, with seven deaths. The cases occurred more or less in groups, personal infection being fairly evident in each group; but the groups were rather widely scattered, without any evident connection between them. This connection must certainly have been through a a number of unrecognised cases. Before the close of the year we were again apparently very free from Diphtheria.

Enteric Fever.—The cases and deaths since 1890 have been :—

		1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
East	Cases	22	34	22	53	27	78	89	51	76	115
	Deaths	6	5	6	7	10	10	24	9	13	23
West	Cases	22	64	53	83	54	56	49	45	41	79
	Deaths	3	11	9	16	7	8	13	12	7	21
Boro'	Cases	44	98	75	136	81	134	138	96	117	194
	Deaths	9	16	15	23	17	18	37	21	20	44

		1900.	1901.	1902.	1903.	1904.
East	Cases	106	50	49	36	19
	Deaths	22	7	12	10	6
West	Cases	89	39	44	35	23
	Deaths	17	10	3	6	6
Boro'	Cases	195	89	93	71	42
	Deaths	39	17	15	16	12

This year's returns of cases are extraordinarily low; the deaths registered are the lowest since 1890, but are very high in proportion to the cases; doubtless many mild cases escape notice.

The quarterly returns of cases were :—

East ..	Cases	4	7	2	6
	Fatal	2	2	—	2
West ..	Cases	4	5	8	6
	Fatal	1	—	3	1

The numbers of fatal cases do not necessarily tally with the deaths registered, as the deaths may occur and therefore be registered after the close of the quarter.

East.—For such a district the East returns are most remarkable; all were apparently separate; of the six cases in the fourth quarter two came here ill; one of these was fatal; the other fatal case that quarter was very doubtful.

West.—The cases were all separate except four in the third quarter, two of which were in one house and two in another.

Table No. 2 gives the particulars of the cases of Diphtheria and Enteric Fever removed to the General Hospital.

Whooping Cough.—During the first half year the Borough suffered from a rather severe and wide-spread epidemic of Whooping Cough, lasting rather longer in the West than in the East; it caused 57 deaths. Many of the public, altogether disregard any care in connection with this disease, as its infectiousness is well known, the lack of care is probably due in part to mere negligence, in part to the disease being considered trivial, and in part to necessity. It is certainly a practical impossibility for most of the poor to attempt any isolation in their homes, and even to keep the affected children indoors is difficult, and apt to be prejudicial to the sufferers themselves; but when a disease kills sixty children in the year it is worth paying some attention to; and children with Whooping Cough ought not to be taken into crowds and on public conveyances as they too often are.

Diarrhœa.—The annual deaths returned as due to Diarrhœa since 1875 have been :—

1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.
96	105	59	93	48	111	46	87	56
1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
140	50	149	105	60	84	68	105	55
1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
161	62	135	131	188	174	132	117	109
1902.	1903.	1904.						
72	86	161						

With the exception of the years 1875-6 and 1886-7 there were regular alterations of high and low returns up to 1895, when the returns were high until the years 1902 and 1903, both of which were rather low ; in the present year we have again a very high return ; and one that is more striking than ever before, inasmuch as it occurs, and is in contrast with very low death returns from other causes. This of course was especially the case in the third quarter, when the epidemic prevailed ; the Diarrhœa deaths that quarter were 130, and the deaths from all other causes only 256. This contrast was still more remarkable in the East, in which district this year's Diarrhœa was much more fatal than in the West ; the East Diarrhœa deaths in the third quarter were 84, and all other causes only 110. Nearly all these Diarrhœa deaths were amongst young children. The contrast between the returns in the two Sub-districts is an important feature ; although the East and West populations are nearly in the proportion of 2 to 3, the Diarrhœal deaths in the former were 121, in the latter 67 ; in fact the mortality in the East has been more than two and a half times that in the West.

There is suspected to be a connection between temperature and Epidemic Diarrhœa, and especially suspicion attaches to the ground temperature. This year the 4-ft. deep temperature first reached 52° in the week ending June 25th ; week ending July 2nd it was 53°. Up to this we had no Diarrhœal mortality. The following table gives the weekly Diarrhœal mortality, and the mean temperatures of the air, and of the ground at one foot and four feet deep for sixteen weeks.

Week ending.	Deaths.	Temperature. Air degs.	1 ft. degs.	4 ft. degs.	Week ending.	Deaths.	Temperature. Air degs.	1 ft. degs.	4 ft. degs.
July 9	1	61·0	61·6	53 8	Sept. 3	15	59·9	60·5	55·9
16	—	65·4	65·1	55·3	10	14	55·9	58·6	56·0
23	2	62·2	64·3	56·4	17	13	54·1	66·9	55·7
30	4	60·6	62·8	56·6	24	13	51·5	54·3	55·2
Aug. 6	9	63·2	63·8	56·9	Oct. 1	6	52·5	53·1	54·3
13	17	57·2	62·0	57·3	8	6	47·5	51·6	53·5
20	25	55·9	60·3	56·9	15	6	47·8	50·7	52·8
27	24	52·7	57·7	56·3	22	2	52·9	52·0	52·2

From the above table in former years the general inference appears to be that when the 1 ft. temperature exceeds 60° and the 4 ft. exceeds 52° Summer Diarrhœa is apt to begin, but that moderately heavy rainfall necessitated higher temperatures before there was severe prevalence. This year rather confounds the above inferences. As severe prevalence of the disease must precede the registration of many deaths by about a fortnight, we may infer that the prevalence was not severe until about July 30th; now (see table No. 4) it was very dry until the week ending July 30th, when there was a very heavy rainfall, which no doubt caused the drop in the 1 ft. temperature that week; and yet this has not lessened the mortality in the following weeks. Again the heavy rainfall of the week ending August 27th, with a corresponding drop in the 1 ft. temperature had no apparent modifying effect.

The following Table gives the annual Diarrhœal deaths since 1900, and the weekly means of the 4 ft. deep earth temperature, the figures in the columns after the second give the number of weeks in each year during which this temperature exceeded the degree at the head of the column :—

		Deaths.	52°	53°	54°	55°	56°	57°	58°
1900	..	177	19	17	14	12	8	4	—
1901	..	144	20	16	14	12	7	2	—
1902	..	101	16	15	12	10	—	—	—
1903	..	113	17	15	12	8	—	—	—
1904	..	188	18	15	12	11	6	1	—

The following gives similar figures for the 1 ft. deep earth temperature :—

		Deaths.	60°	61°	62°	63°	64°	65°	66°
1900	..	177	11	9	6	5	2	1	1
1901	..	144	9	8	7	5	2	—	—
1902	..	101	5	3	3	2	1	—	—
1903	..	113	7	1	1	—	—	—	—
1904	..	188	8	6	5	3	2	1	—

The record for the previous decade will be found in last year's report. As far as the figures go they show a considerable relation between the temperature and the deaths, especially the higher 4 ft. temperature, those above 55°; but the relation is not a consistent one. The subject was gone into fully in the 1897 Annual Report.

BOROUGH HOSPITAL.

There were 54 cases of Scarlet Fever in at the close of last year. The quarterly numbers dealt with this year have been as follows:—

Quarters.	Remaining in in from previous Quarter.	Admitted for.		Total Discharged.		Died.		Average number of days in of the Scarlet Fev'r cases admitted.	Average daily number of Scarlet Fever Patients in Hospital.
		Scarlet Fever.	Small Pox.	Scarlet Fever.	Small Pox.	Scarlet Fever.	Small Pox.		
First ..	54	11 [3 (a), b]	..	127	..	2	..	41·5	54·1
Second ..	40	104 [c, d]	11	101	7	4	..	39·8	46·0
Third ..	47	102 *e*	..	91	4	1	..	42·2	43·9
Fourth ..	54	120 *f*	..	131	..	5	..	41·4	59·1
Year ..	54	439	11	450	11	12	..	41·2	50·8

Leaving 43 cases of scarlet fever in at the close of year.
(a) 8 from the Tettenhall District, *(b)* 2 from the Workhouse.
(c) 1 ,, ,, ,, *(d)* 12 ,, ,,
(e) 11 ,, ,, ,,
(f) 10 ,, ,, ,,

The following are the summaries of the cases admitted for Scarlet Fever in each quarter:—

First Quarter.—One hundred and thirteen cases were admitted. Two cases were fatal:—A, 6 years old, collapsed when admitted, rallied, but died next day; B, 7 years old, meningitis, 17 days in. Eight cases were very severe, and 20 severe. Complications:—Rhinitis, 7 cases; Otorrhœa, 12 cases (2 of these had been subject to it); Adenitis, 7 cases; Suppuration, 4 cases; Skin Affections, 11 cases; Rheumatism, 1 case; Nephritis, 1 case; Onychia, 2 cases; Appendicitis, 1 case. Five children were found to have Whooping Cough.

Second Quarter.—One hundred and four cases were admitted. One had not Scarlet Fever. Five cases were fatal:—A, 7 months old, severity of illness Toxæmia, 7 days in; B, 4 years old, collapsed when admitted, and died in six hours; C, 14 months old, severity of illness Toxæmia, 6 days in; D, 2 years old, very severe septic case, Toxæmia, cellulitis of neck, 13 days in; E, 7 years old, very severe septic case, double adenitis and suppuration, Pyæmia, 19 days in. Eight cases were very severe, and twelve cases severe. Complications: Rhinitis, 6 cases; Ottorrhœa, 10 cases; Adenitis 10 cases; Suppuration, 3 cases; Skin Affections, 5 cases; Nephritis, 1 case; Onychia, 1 case. One child was found to have Whooping Cough. One child had Mumps 15 days after admission. There were three cases of tubercular glands in the neck.

Third Quarter.—One hundred and two cases were admitted. Two were fatal:—A, 9 months old, severe bronchitis, diarrhœa, cellulitis of neck, 35 days in; B, 7 years old, Nephritis, Uræmia, 34 days in. Ten cases were very severe, and 9 cases severe. Complications:—Rhinitis, 7 cases; Otorrhœa, 9 cases; Adenitis, 3 cases; Suppuration; 4 cases; Skin Affections, 11 cases; Onychia, 2 cases; Nephritis, 2 cases; Rheumatism, 1 case; Appendicitis, 1 case.

Fourth Quarter.—One hundred and twenty cases were admitted; one had not Scarlet Fever. Three were fatal:—A, $1\frac{3}{4}$ years old, very severe septic case, Keratitis, suppuration of eyeball, cellulitis of neck, 20 days in; B, 2 years old, very severe attack, adenitis and cellulitis of neck, 4 days in; C, 7 years old, very severe Scarlet Fever and Diphtheria, double adenitis and cellulitis of neck, 7 days in. Seven cases were very severe, and seventeen severe. Complications:—Rhinitis, 14 cases; Otorrhœa, 15 cases; Adenitis, 5 cases; Suppuration, 3 cases; Skin Affections, 10 cases (2 were psoriasis); Nephritis, 4 cases; Rheumatism, 1 case; Pneumonia, 1 case. One case had Chicken Pox when admitted; one case had severe secondary throat. During the year nine cases were attended by their own doctors, four doctors attending.

The following table gives the proportion of cases without definite signs of Scarlet Fever when seen after admission, and the results :—

Quarters.	Total Admissions.	Indefinite when admitted.				
		Total.	Apparently not had Scarlet Fever.			
			Total.	Safely Discharged.	Caught Scarlet Fever.	Died.
First ..	113	8	1	..	1	..
Second ..	104	16	4	1	3	..
Third ..	102	9	2	..	2	..
Fourth ..	120	11	5	1	4	..
Year ..	439	44	12	2	10	..

When we consider the difficult conditions under which many of these cases are seen, in their own homes, less than three per cent. is a small proportion of error; unfortunately, all but two caught the fever in the Hospital, and, fortunately, all recovered.

Return Cases.—By these are meant cases that occur in a household to which a patient has recently returned from an Infectious Hospital, and which are supposed to be due to infection from such patient. The possible sources of infection in these cases were fully dealt with in last year's report. We have continued the practice of discharging our patients when they appeared free from obvious infective lesions, without special regard to any time limit, instead of waiting for seven weeks, as was the practice before 1903; and in spite of this we have had comparativeley few return cases. During the year 436 Scarlet Fever patients returned to their homes, and in only fifteen instances were fresh cases at all traceable to them.

The particulars of these are as follows :—A, 43 days in hospital, 48 ill, had Herpes and Rhinitis, but well since return; 21 days after return another child was taken ill. B, 34 days in, 42 ill, 20 days after return another child was taken ill, and 4 days after this another. C, 38 days

in, 41 ill, had Rhinitis in hospital, well since return ; a neighbour's child played with this, and was ill eight days later ; child in C's house ill 19 days after return. D, 51 days in, 52 ill, Otorrhœa, well since return ; washing from next door done here ; 8 days after return a child next door was taken ill, and 18 days after that another. E, 42 days in, 44 ill, very severe case, since return had earache, sore toe, and some doubtful nasal discharge ; 17 days after return father taken ill, 3 days later another child (who had been with the father while he was ailing). F, 39 days in, 42 ill, no complications ; some few days after return, spat in the face of a neighbour, who was taken ill 15 days after the return ; 4 other children in F's house, and none taken ill. G, 39 days in, 43 ill, no complications, some nasal catarrh since return ; 16 days later another case, and 8 days after that another. H, 38 days in, 41 ill, no complications, went to grandmother's, and communication with home denied ; in 14 days another case at home. I, 40 days in, 41 ill, no complications, after return had sores on lip and chin ; 12 days after return another case. J, 45 days in, 47 ill, some Rhinitis, old mastoid operation, and some discharge from this ; 8 days after return took tea with neighbour's child, who had rash 36 hours later ; 7 days after this another case in the neighbour's house. K, 50 days in, 53 ill, delayed by Rhinitis, some nasal soreness since return ; 7 days later another case. L, 71 days in, delayed by impetigo of scalp ; played with a neighbour's child on the day of return, who was taken ill 7 days later ; 2 children in L's own house were not taken ill. M, 38 in, 41 ill, no complications ; 2 days after return another case, and 2 days after that another. N, 39 days in, 40 ill, no complications ; mother taken ill 2 days after return. O, 40 days in, 42 ill, no complications ; 4 days after return another case, and another two days after that. Of course, in many of these cases there is much doubt as to the actual source of infection, but there is reasonable probability that these 15 discharged cases caused these 23 others. We invariably find many illustrations of how readily hospital infection might be wrongly inferred ; the following is a sample :—A child is examined for discharge, and detained because of some nasal mischief ; 2 days later a sister is admitted, from her home, just taken ill ; 9 nine days later another sister is taken ill.

METEOROLOGY.

(See Table 4.)

First Quarter.—The weather was remarkably unseasonable; excepting occasional days there was only one week of severe cold, that ending on March 5th; the mean temperature for the week was 31°·9. During the rest of the quarter the mean weekly temperature was only twice below 37° (5th and 7th weeks, which were cold and wet). All through the quarter, but more exceptionally during January and February, the weather was very changeable; the difference between the highest and lowest temperature was often very great, this being especially marked on the milder days. The changes from wet or fog to bright cold weather were frequent and rapid.

There was fairly frequent high wind. There was very high wind (N.W.) on the 13th and 14th, and rather high wind (S.W.) on the 27th and 29th of January. It was very stormy on February 12th, 13th, 19th, and 20th, and there was a severe storm on February 21st. There was high wind during the last week, very high on April 1st and 2nd. During the first half of the quarter the wind was mostly from the South and West, then for some weeks there was an Easterly tendency, varying from South East to North-East. The closing high wind was South-West.

The rainfall, 6·96 inches, was heavy, considerably above the average. It fell principally in January and February. The first two weeks in February were very wet (2·42 inches); the last week in February, and March up to the 26th were comparatively dry. There were very heavy showers during the last week of the quarter.

The mean humidity, 86, was rather high.

The atmospheric pressure varied extremely with the varying weather conditions. The Barometer was very low during the first three weeks in February; during the last of these weeks its range was over an inch. During five other weeks of the quarter the range was nearly an inch.

Second Quarter.—The weather continued very moderate; only once the shade temperature fell slightly below freezing point (on May 8th, the general temperature was very mild, after the middle of May it was warm, the last three weeks of the quarter were hot.

The total amount of wind was high; nearly all through the first week there was a high North-West wind; there was a very high West wind from April 29th to May 2nd. There was almost a gale from the East on June 6th, and high North-East wind from June 7th to the 9th, and South-West from the 14th to the 18th.

There was a notable change in the rainfall, the quarter being rather dry; the total fall was 3·91 inches. The second week was very wet; there were very heavy showers on April 22nd; the seventh week was rather wet; the eighth week very wet, there were heavy thunderstorms on May 27th; for the rest we had only occasional showers. During the whole of June we recorded rain on only six days, the total fall for the month being only 0·41 inches.

The mean humidity, 74, was very low; there was an exceptional amount of bright clear weather.

The barometer was moderately high, and as a rule steady. There were occasional sudden variations of wind.

Third Quarter.—During the third quarter the high temperature at the close of the second quarter rose still further until the second week (ending July 16th), the hottest week of the year, maximum temperature 82°·9, mean 65°·4); the temperature then continued high, but fell very gradually until the eighth week (ending August 27th), which was only moderately warm; the ninth week was again hot, the temperature then falling to the close of the quarter.

Our records of the exact amount of wind have been interrupted; on the whole there was not much wind during the quarter. There were S.W. gales on August 6th and 14th. The general direction of the wind was Westerly; during the 11th and 12th weeks it was S.E.

The total rainfall, 6·42 inches, was a moderately high one, but most of the quarter was very dry, the rain falling heavily during brief periods. The first three weeks were very dry (0·16 inches of rain). The fourth week was very wet; there was a severe thunderstorm on July 25th (1·65 inches of rain fell that day), almost constant rain continued until the 29th (week's rainfall 2·27 inches). The fifth and sixth weeks were dry, but for a thunderstorm on August 3rd, and some heavy showers on the 4th. During the seventh week there were frequent showers, at times very heavy. The eighth week was very wet (1·66 inches), nearly all of which fell on August 21st and 22nd. There were some heavy showers on three days in the ninth week, and there was very heavy rain on September 12th; the rest of the quarter was very dry.

The mean humidity, 77, was low.

The barometer as a rule was high and steady.

Fourth Quarter.—The weather was on the whole temperate and devoid of any special features, but there were occasionally rapid and extreme changes. The moderate temperature at the close of the third quarter continued with but slight fall through the first seven weeks; the eighth week was a little colder, the night temperatures touching freezing point. The ninth week was intensely cold, the mean temperature for whole week was only 29°·5, there was hard frost from November 23rd to the 27th, the minimum temperature (on November 24th) being 14°·2. Then the mean temperature again rose to nearly 40°, and continued so until the 12th week, when it again fell to just below freezing point, with severe night frosts; this continued until the last four days, when it became slightly warmer before the drop; the mean temperature ranging several degrees over forty.

We have no accurate record of the amount of wind, but there appeared to be much less than usual. The West was the prevailing direction. There was high N.W. wind from the 7th to the 9th of November. On December 4th and 12th there was high S.W wind; and from the 28th to the 30th of December there was a severe N.W. gale.

The total rainfall, 3 23 inches, was very low. There were some fairly heavy showers at the close of the first week, and again during the sixth week. There was sleet and a snowstorm on November 21st, and a slight snowstorm on the 23rd. During the tenth week there were frequent showers, and rather heavy snow at the close of the week. This continued in a less degree through the eleventh week.

The mean humidity, 91, was very high, and in marked contrast to the low rainfall. Although there was so little effective rain there was an exceptional amount of drizzle, mist, and fog. The first three weeks were fine, with fair sunshine, but there were many slight showers; the fourth week was dull and foggy. The first three days of the fifth week there was almost incessant fine drizzle. During the seventh week there was almost constant fog. During the eighth and ninth weeks dull weather with frequent fog. During the last fortnight there was almost always either fog or drizzle.

The barometer during the first eight weeks ranged rather high; during the rest of the quarter it was rather low, with occasional extreme variations.

The total rainfall for the year was 20·52 inches, a little below our average, and 9·39 inches less than last year.

REMARKS ON THE TABLES.

Under this heading reference should be made to the full explanations given in last year's report, which are too lengthy to repeat. I will only repeat that in all our tables account is taken of deaths of Wolverhampton residents only; all deaths of outside residents occurring in, and therefore registered in the Borough, being reported to the medical officers of the districts to which they belong; the total is in the column numbered 10 in table No. 9. These deaths were much fewer this year than usual. Further, deaths of Wolverhampton residents occurring outside the Borough, and reported to me, are included in our tables; this year they number 60, see column numbered 11 in table No 9. Most of these deaths were from the Workhouse at Wednesfield. Unfortunately, there is an error in these

figures. A few cases used always to be returned from the Workhouse as having no address, such cases, while the Workhouse was in the East Sub-district in the borough, I included in the East, and, therefore, in the Borough returns; but since the removal of the Workhouse from the Borough I excluded these cases from our tables. I was surprised, on looking through the year's figures, what an unusually large number of these cases there were, and on inquiry found that, for this year, when a person had been for some years in the Workhouse no definite address was sent. This, of course, was an error, and in consequence some 40 deaths (about) are excluded from our tables that ought to have been included. They would not affect our general statistics in any way, and would only raise our death-rate two or three decimal points. I cannot tell how they affect the relative East and West returns, in table No. 10, but probably most of them would have come from the East. We are now getting the fullest particulars of all deaths, and the above error will be avoided in future.

VITAL STATISTICS.

We have never had such cause for self-congratulation as regards our death statistics as this year. I have been most chary of inferring too much from the steadily maintained improvement since (and including) 1901; now I feel that we may, with considerable confidence, begin to draw some conclusions from figures which have been consistent for four years; especially because in the last year there has been a complete change in the peculiar weather conditions which marked the three years previous, and we have in consequence actually suffered from a severe fatality from Diarrhœa, and yet in spite of this we more than maintain our improvement on our own previous records, and our improved position as regards the greater towns.

We will take the latter point first, and here we are only dealing with the Registrar-General's figures, and any local error does not affect these.

For the nine years preceding 1901 our position in the 33 great towns and the *excess* of our death-rate over their total death-rate has been—

	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Position	25th	24th	29th	26th	24th	26th	27th	26th	27th
Death-rate excess	0·19	1·03	2·07	3·18	0·43	2·42	1·68	0·99	2.44

That is, during this nine years, on an average, 25 of the towns had a lower rate than ours, and only 7 had higher, and our rate was 1·6 higher than the total rate of the towns. During the four following years our position and the excess of their death-rate over ours has been—

	1901.	1902.	1903.	1904.
Position	8th	8th	11th	3rd.
Death-rate excess	1·89	1·20	1·17	2·99

See table No. 11. The death-rates in this table are corrected for the age distribution in each town, and are a more correct basis for comparison than the ordinary rates. Croydon 14·15 and Leicester 15·48 are the only towns with lower rates than than ours, 16·01; Bristol is 16·03, and Cardiff 16·13. In the table only one place of decimals is given. I give the two places for these few towns closest to us. Of course, we must not conclude anything from our very extraordinary position this year alone, but the change from the previous nine years to the last four is a very gratifying one, and certainly indicates a marked improvement in our condition. This is all the more striking inasmuch as there has been a remarkable improvement in the death-rate throughout all the towns in about the same period of four years.

As regards details of deaths from Table No. 11, Measles we had no death from, several of the towns suffered heavily; this at present can only be regarded as accidental. Scarlet Fever was generally very little prevalent; our death-rate is low, four of the towns have the same rate as ours, and only seven have higher. Diphtheria: Our death-rate is moderate, two of the towns have the same and fourteen have higher. Whooping Cough we suffered heavily from, only seven of the towns have a higher rate. Fever (really Enteric Fever): Our death-rate is very low, but only fourteen of the towns have any higher. Diarrhœa we have a very heavy death-rate from, but as it was generally prevalent most of the towns suffered similarly, six have a considerably higher rate. The child death-rate is greatly influenced by Diarrhœa, so that ours is very high, but 23 of the towns have a higher, some a much higher rate.

The birth-rate has a marked effect upon the death-rate, and this is shown very clearly in Table No. 11. Our rate is a modertely low

one, but 20 of the towns have lower. The general decline in the birth-rate, especially in certain towns, is a matter of very grave import. Our own rate has steadily and continuously fallen, see Table No. 9.

The comparison of our present rate with our own past is an equally gratifying one. For the last twenty years of the last century our average death-rate was 20·9, the lowest recorded rate being 19·3, the highest 23·7. During the next four years the average rate was 15·7, falling steadily from 16·7 in 1901 to 14·6 in 1904. Possibly, if all our deaths in the Workhouse had been included this year our rate might be nearly 15·0. The mere figures in the Table are more striking than any comment on them could be. Table No. 10 gives the figures for the Sub-districts since 1884. In the East, for the last seventeen years of the nineteenth century the average death-rate was 24·5, ranging from 28·0 to 21·3; in the next four years the average was 18·7, falling from 19·9 to 17·3. In the West the seventeen years average was 18·0, ranging from 20·3 to 16·0 During the four years the average was 13·4, falling steadily from 14·4 to 12·6.

SANITARY CONDITION OF, AND SANITARY WORK DONE IN, THE BOROUGH.

There is nothing to add to what has been reiterated in recent Annual Reports as to our Sanitary condition and our principal needs. I should like to draw special attention to the work which is being systematically and continuously done. Up to the year 1895 the inspectorial staff consisted of a Chief Inspector and two District Inspectors, one for the East and one for the West, the East Inspector was a capable officer, the West an elderly man without any special qualification. There was also a clerk; the office accommodation was one small room. In spite of the evident need for increased staff and increased room, economy and local difficulty stood in the way. As the work was falling behind, and hardly sufficed to keep things from retrograding, in March, 1895, I made a full report on the matter, and urged that at least three District Inspectors should be appointed, and the town divided accordingly. This was not adopted, but the routine inspection was spread over three weeks instead of two as pre-

viously, in order to enable back work to be overtaken. This was practically conceding that less work should be attempted. As was to be expected, this system immediately broke down, and in March, 1896, I made a very full report on the whole subject. In this report I pointed out that the work had failed from 1890, and in 1894 altogether collapsed, and nothing short of a proper staff and accommodation could re-establish the work. I suggested that the Borough should be divided into four divisions, each in charge of a District Inspector, all under one Chief ; and I detailed a scheme and suggested temporary alterations in the office, pending the provision of proper offices. All this was then done, and real work was commenced, but the severe and prolonged illness of the then Chief Inspector, the partial efficiency of some of the District Inspectors, and the cramped office were serious checks. The Chief's illness, in particular, left the scheme without proper supervision, as I could not possibly supervise details, and the work fell behind and got into confusion. 1898 Mr. Peers was appointed Chief Inspector, and rapidly got the work into systematic train. It was still hampered by weakness in the District Staff and by office restrictions, but eventually the weaker members of the Staff were replaced and we moved into proper offices. I should add that it was found necessary, in 1903, to add a special Inspector for Workshops to the minimum staff, adopted on my suggestion in 1896.

A brief study of Mr. Peers's report (appended to this) and of the tables will show what an enormous amount of practical work is being done in improving and maintaining the general sanitary condition of the town ; and a reference to his reports and tables for the previous five years will further emphasize this. This work may be said to have commenced with 1899, though not in full swing until a year later. I have over and over again stated that this work is the great work of our Department, and have protested against the common cavil against much of it that it is trivial. In last year's report occurs the following :—

"It must not be forgotten that the great work of our Health Department is in dealing with the petty deficiencies already mentioned. The Tables in Mr. Peers's Report gives particulars of this work during the year ; a glance at those shows clearly that although most of the individual nuisances may, taken by themselves, appear trivial, yet in the aggregate

their evil effect must be enormous, and the total improvement due to their abatement is proportionately great. Undoubtedly, whatever credit may be due to our department for the striking improvement in the Town's health is due to this part of our work."

The late Alderman Major attributed the rise in our death-rate after 1890 to the breakdown in nuisance abatement work. We could not expect to see the effects of much work on our death-rate for a year or two after the work began. Now the fact that improved work began in 1899, and was increased in efficiency during that year and the next, and then we commenced a new era as regards our death-rate, which has continued improving ever since, is too striking to be overlookod. I do not suppose that the whole of the great drop in 1901 is due to our work, for that drop occurred in part throughout the country, and was almost certainly in part due to climatic and other causes; bnt considering that with the great improvement in our own death-rate there coincided a similar improvement in our relative position in the towns, and that both these improvements have been maintained since, through varying weather, it is impossible to doubt but that most of our improvement is due to systematic work in the abatement of so-called nuisances. It must be remembered that the more we improve the less further improvement is possible, and more work will be needed even to keep up to the higher level.

One apparent blot remains, the higher death rate in the East compared with the West. Although the drop from the seventeen years to the four years' average in the East (5·8) has been actually and relatively greater than in the West (4 8) there still remains a terrible difference in the four years' improved averages, the East being 18·7, the West 13·4. This is in part due to the greater child population in the East; see the relative birth-rates, and the infant death-rates in Table No. 10; and it is in part due to poverty; I have frequently pointed out that many unhealthy conditions are directly and indirectly due to poverty, and do not come within the province of Public Health Work.

Workshops.—We have about 1030 Workshops on our Register; the number varying very slightly from time to time, as old workshops are closed or new ones opened (see list on page 7 of Chief Inspector's

Report for 1903). The work done in connection with these is set out in Table D of the Chief Inspector's Report, and some details of the work will be found in the body of his Report. The whole of the work presents considerable difficulty because of the very old-fashioned type of most of our workplaces; but much good work is being gradually done.

The method of dealing with cases of insufficient or unsuitable sanitary accommodotion is needlessly cumbersome; cases are first reported by our Workshops Inspector, (occasionally by H.M. Factory Inspector), then referred to the Borough Surveyor, then reported on by him; then by order of the Health Committee notice is served by our Department on the Borough Surveyor's report. The standard of sufficiency and suitability is on the basis of the the order issued by the Secretary of State, February, 1903.

The various employers of work pay little or no attention to the requisition as regards supplying lists of outworkers, circulars have to be despatched on every occasion, and even these fail to elicit any response from many employers. There appears to be considerable reluctance to enforce this provision.

The Bakehouses are being generally kept in much better condition, but many are hardly fit for their purpose. We have only one underground bakehouse in the Borough, and that is only partially so, and is fairly well ventilated and lighted. We have 103 Bakehouses in the Borough.

House Inspection and Closure.—Particulars of these are mentioned in the Chief Inspector's Report and Tables. Out of many houses inspected, I have only recommended 13 for closure. Such a small number is in some part because most of the very worst houses have already been closed; in part because a number of the worst houses are being automatically closed through the tenants leaving them for slightly better. A large number of better class artizans' houses have been built in the Borough during the last few years, this has led to a migration from older houses in fair condition, and these in turn have been taken up by those from poorer property; there has been probably in consequence some reduction in the rents of some of the older properties. There still of course remain many

houses not really fit for habitation; but I have been checked in dealing with these through the general depreciation and poverty, which renders the time unsuitable for too energetic action. The same consideration has had weight in checking our Department in needed reforms in many directions; but I think I can say that no very necessary matter has been neglected; we can press for higher ideals when we have more ideal work and trade conditions.

INDEX TO TABLES.

TABLE No. 1.

Cases of Infectious Diseases recorded in 1904.

		East Sub-District. Population 40,635.					West Sub-District. Population 57,965.					Borough. Population 98,268.					Totals.			Rate per 10,000 of Population.		
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	East Sub-District	West Sub-District	Borough	East Sub-District	West Sub-District	Borough
Small Pox ...	Under 5 years ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	5	11	1·5	0·9	1·1
	5 years & upwards	...	6	...	...	6	...	5	...	...	5	...	11	...	...	11						
Measles ...	Under 5 years ...	24	26	7	21	78	15	31	6	4	56	39	57	13	25	134	195	148	343	48·0	25·5	34·9
	5 years & upwards	26	60	21	10	117	14	60	11	7	92	40	120	32	17	209						
Scarlet Fever	Under 5 years ...	19	10	10	18	57	29	21	22	21	93	48	31	32	39	150	186	291	477	45·8	50·2	48·5
	5 years & upwards	41	25	25	38	129	39	52	53	54	198	80	77	78	92	327						
Diphtheria...	Under 5 years ...	1	2	...	8	11	3	...	3	7	13	4	2	3	15	24	23	55	78	5·7	9·5	7·9
	5 years & upwards	3	2	3	4	12	4	5	8	25	42	7	7	11	29	54						
Enteric Fever	Under 5 years ...	...	...	...	...	...	...	1	1	...	2	...	1	1	...	2	19	23	42	4·7	4·0	4·3
	5 years & upwards	4	7	2	6	19	4	4	7	6	21	8	11	9	12	40						

TABLE No. 2. (Table III, L.G.B.)

Cases of Infectious Disease Recorded during the Year 1904, and the Proportion Treated in Hospital.

	DISEASE.		CASES RECORDED.							CASES TREATED IN HOSPITAL.						
			At all Ages.	At Ages—Years.						At all Ages.	At Ages—Years.					
				0—	1—	5—	15—	25—	65—		0—	1—	5—	15—	25—	65—
EAST SUB-DISTRICT.	Scarlet Fever	Cases	186	...	57	118	4	7	...	167	...	51	108	4	4	...
		Deaths	9	...	4	5	...	...	...	5	...	2	3	...	...	...
	Diphtheria	Cases	23	...	11	4	6	2	...	12	...	7	1	4	...	...
		Deaths	7	...	6	...	1	...	...	5	...	4	...	1	...	...
	Enteric Fever	Cases	19	...	...	...	8	11	...	11	...	...	...	6	5	...
		Deaths	6	...	...	...	3	3	...	4	...	...	...	2	2	...
WEST SUB-DISTRICT.	Scarlet Fever	Cases	291	2	91	172	16	10	...	226	1	67	135	15	8	...
		Deaths	5	...	3	2	...	...	...	5	...	3	2	...	...	...
	Diphtheria	Cases	55	1	13	27	7	7	...	15	...	5	7	1	2	...
		Deaths	11	1	5	5	...	...	...	4	...	2	2	...	...	...
	Enteric Fever	Cases	23	...	1	5	10	7	...	9	...	...	1	6	2	...
		Deaths	5	...	...	..	1	4	...	2	...	...	...	1	1	..
BOROUGH.	Scarlet Fever	Cases	477	2	148	290	20	17	...	393	1	118	243	19	12	...
		Deaths	14	...	7	7	...	...	...	10	...	5	5	...	...	...
	Diphtheria	Cases	78	1	24	31	13	9	...	27	...	12	8	2	2	...
		Deaths	18	1	11	5	1	...	...	9	...	6	2	...	...	...
	Enteric Fever	Cases	42	...	1	5	18	18	...	20	...	.	1	12	7	...
		Deaths	11	...	...	...	4	7	...	6	...	...	...	3	3	...

Diphtheria includes "Membraneous Croup"; and Enteric Fever includes "Continued Fever."

392 of the Scarlet Fever hospital cases were treated in the Borough Isolation Hospital, one case was treated in the General Hospital.

Of the 27 Diphtheria hospital cases 26 were treated in the General Hospital, so were the 20 Enteric Fever cases. One Diphtheria case was a Nurse in the Borough Hospital.

Of the General Hospital cases, 8 East and 12 West Diphtherias; and 7 East and 7 West Enteric Fevers were treated on the order of the Health Committee.

TABLE No. 3.

WEEKLY RETURNS under the Infectious Diseases Notification Act, and prevalence of certain other Diseases.

A few cases x. Prevalent xx. Very prevalent xxx.

1904. Week ending.	Small Pox.	Scarlet Fever.	Diptheria.	Enteric Fever.	Puerperal Fever.	Measles.	Whooping Cough.	Pneumonia	Influenza.
January 9th..	..	12	1	..	..		xx	xxx	xxx
,, 16th..	..	18	1	..	..	xx	xx	xx	xx
,, 23rd..	..	16	3	2	..	xx	xx	xx	xx
,, 30th..	..	8	2	..	..	xx	xx	xx	x
February 6th..	..	8	..	1	..	xx	xx	xx	x
,, 13th..	..	7	..	1	..	xx	xx	xx	x
,, 20th..	..	6	1	1	..	xx	xx	xx	x
,, 27th..	..	12	1	3	..	xx	xxx	xx	x
March 5th..	..	4	..	..	1	xx	xxx	xx	x
,, 12th..	..	9	1	..	..	xx	xxx	xx	x
,, 19th..	..	8	1	..	..	xx	xxx	xx	x
,, 26th..	..	7	..	..	..	xx	xxx	xx	x
April 2nd..	..	15	..	2	..	xx	xxx	xx	x
,, 9th..	..	8	..	..	..	xx	xxx	xx	xx
,, 16th..	..	10	..	1	..	xx	xxx	xx	xx
,, 23rd..	..	5	1	1	..	xx	xxx	xx	xx
,, 30th..	..	7	1	..	..	xx	xxx	xx	xx
May 7th..	1	12	1	2	..	xx	xxx	xxx	xx
,, 14th..	..	6	2	3	..	xx	xx	xxx	xx
,, 21st..	..	9	..	1	..	xx	xx	xxx	xx
,, 28th..	..	11	..	1	..	x	xx	xx	xx
June 4th..	..	11	2	1	..	x	xx	xx	xx
,, 11th..	7	9	1	1	..	x	xx	x	x
,, 18th..	..	6	..	..	..	x	xx	x	x
,, 25th..	3	6	1	1	..	x	x	x	x
July 2nd..	1	9	..	..	1	x	x	x	x
,, 9th..	..	10	3	..	..	x	x	x	x
,, 16th..	..	9	..	..	..	x	x	x	x
,, 23rd..	..	6	1	..	..	x	x	x	x
,, 30th..	..	6	..	..	..	x	x	x	..
August 6th..	..	6	..	..	..	x	x	x	..
,, 13th..	..	10	..	..	..	x	x	x	..
,, 20th..	..	9	1	1	1	x	x	x	..
,, 27th..	..	7	1	1	..	x	x	x	..
September 3rd..	..	12	2	1	..	x	x	x	..
,, 10th..	..	12	1	5	..	..	x	x	..
,, 17th..	..	4	..	..	..	x	x	x	..
,, 24th..	..	12	3	3	1	x	x	x	x
October 1st..	..	7	3	..	..	x	x	x	x
,, 8th..	..	8	3	1	..	x	x	x	x
,, 15th..	..	20	2	1	..	..	x	x	x
,, 22nd..	..	9	7	2	..	x	x	x	xx
,, 29th..	..	10	4	..	..	x	x	x	xx
November 5th..	..	7	4	..	..	x	x	xx	xxx
,, 12th..	..	7	1	1	..	x	x	x	xx
,, 19th..	..	16	5	2	..	x	x	x	xx
,, 26th..	..	12	3	3	..	x	x	x	xx
December 3rd..	..	16	5	..	..	x	x	x	xx
,, 10th..	..	11	..	1	..	x	x	xx	xx
,, 17th..	..	9	4	..	..	x	x	xx	xx
,, 24th..	..	4	4	1	1	x	x	xx	xxx
,, 31st..	..	8	1	..	..	x	x	xxx	xxx
YEAR ..	12	486	78	45	5				

Tables 1 and 2 do not tally: 1 including a few cases not reported by Doctors, and 2 including some cases which ultimately proved incorrect.

TABLE No. 4.

Weekly Meteorological Report, from observations taken at 9 a.m. daily.

Week ending.	Barometer Reduced to 32° and Sea Level.		Humidity.	Temperature.					Rain.	Wind.		Death Rate per 1,000 per annum.
				Max.	Min.	Mean.	Earth.			Prevailing Directions.	Total in Week.	
	Mean.	Range					1ft.	4ft.				
1904.	in.	in.	0-100	o	o	o	o	o	in.		mls.	
January 9th	29·900	.711	95	47·6	30·0	37·8	38·3	43·6	·52	SW	1153	14·3
,, 16th	29·540	·930	88	52·1	30·7	40·4	39·7	43·4	·79	NW	1661	18·6
,, 23rd	30·519	·509	92	48·7	26·0	38·3	38·9	43·3	·04	NE	681	13·8
,, 30th	29·870	·832	89	51·0	26·8	39·5	39·6	43·0	·59	SW	1381	13·8
February 6th	29·359	·232	94	47·0	29·6	36·8	39·5	43·2	1·17	SW, SE	1241	20·2
,, 13th	29·202	·865	90	48·5	31·6	38·6	38·8	42·8	1·25	SE, SW	1721	15·4
,, 20th	29·459	1·136	84	52·0	26·1	36·7	37·8	42·5	·69	SW, N.W.	1476	16·5
,, 27th	30·115	·386	79	52·0	31·3	37·8	40·0	42·2	·39	SE, S	1465	14·3
March 5th	30·111	·323	88	39·0	23·9	31·9	36·4	42·0	·21	NE	1647	13·8
,, 12th	30·028	·821	88	53·6	26·5	39·4	38·6	41·6	·37	NE, SE	1089	14·9
,, 19th	29·958	·411	82	52·7	26·1	39·6	39·8	41·8	·23	SW	1004	17·0
,, 26th	30·184	·485	80	60·6	29·0	40·9	43·3	42·4	·12	SW, NE	1422	18·1
April 2nd	29·833	·972	76	51·0	31·0	41·2	42·0	42·9	·59	SW	1704	16·5
,, 9th	29·911	·208	69	62·9	36·2	46·3	45·6	43·5	·09	NW	2266	21·8
,, 16th	29·731	·758	77	60·4	35·8	45·6	47·4	44·5	·86	W	1224	17·5
,, 23rd	30·065	·364	73	60·8	35·9	46·0	47·9	45·3	·25	NW, NE	1022	11·1
,, 30th	30·073	·339	73	63·9	36·0	48·6	49·2	46·0	·02	W	1402	18.1
May 7th	29·855	·588	71	60·6	40·3	48·4	50·3	46·7	·18	SW, NW, E	1171	7·4
,, 14th	29·876	·609	81	66·0	31·2	48·3	49·0	47·4	·24	NW, SE	886	10·1
,, 21st	30·026	·425	73	71·3	35·5	49·7	53·2	47·8	·55	W, SE	1261	11·1
,, 28th	29·948	·362	83	69·7	42·5	54·5	53·7	48·8	1·02	SW	516	12·2
June 4th	30·119	·447	78	70·4	41·7	53·5	55·9	49·8	·37	E	967	16·5
,, 11th	30·110	·464	77	65·8	43·5	52·2	58·4	50·9	·05	NE	1526	10·6
,, 18th	29·957	·338	71	68·2	47·9	56·8	57·8	51·7	·09	SW		12·7
,, 25th	30·065	·884	72	69·9	43·3	54·5	58·7	52·3	·08	NW		6·9
July 2nd	29·990	·397	64	74·7	42·1	57·0	59·9	53·0	·11	SW, SE		10·6
,, 9th	30·090	·346	65	82·5	44·9	61·0	61·6	53·8	·06	W		11·7
,, 16th	30·068	·371	66	82·9	52·0	65·4	65·1	55·3	·02	SW		6·9
,, 23rd	30·109	·376	64	79·6	50·6	62·2	64·3	56·4	·08	SE, SW		11·7
,, 30th	29·905	·372	87	76·5	54·0	60·6	62·8	56·6	2·27	E, SW		11·1
August 6th	30·030	·353	69	83·8	53·2	63·2	63·8	56·9	·19	SW		12·7
,, 13th	30·053	·439	71	71·9	46·5	57·2	62·0	57·3	·10	NW		19·6
,, 20th	29·856	·414	79	70·0	44·2	55·9	60·3	56·9	·69	SW, NW		28·1
,, 27th	30·036	·412	83	73·1	40·9	52·7	57·7	56·3	1·66	SW, NW		23·4
Septem. 3rd	29·975	·405	81	77·5	48·9	59·9	60·5	55·9	·47	SE, NW		21·8
,, 10th	30·037	·304	81	70·6	42·5	55·9	58·6	56·0	·23	SW, NW		15·9
,, 17th	30·020	·541	86	69·4	40·3	54·1	56·9	55·7	·44	SE		12·2
,, 24th	30·239	·172	74	67·8	39·6	51·5	54·3	55·2	·18	SE		18·1
October 1st	30·013	·411	91	65·4	37·4	52·5	53·1	54·3	·03	SW		11·7
,, 8th	29·973	·648	83	61·1	33·1	47·5	51·6	53·5	·20	W		18·6
,, 15th	30·336	·936	88	61·9	32·5	47·8	50·7	52·8	·15	SW, SE		15·9
,, 22nd	30·066	·613	91	62·5	36·0	52·9	52·0	52·2	·12	SW		11·7
,, 29th	30·176	·517	95	55·5	35·1	45·2	49·3	52·0	·03	NW		9·6
Novem. 5th	30·284	·423	92	56·9	42·0	47·4	48·9	51·3	·08	NE, NW		13·3
,, 12th	29·893	·697	89	58·6	37·1	47·1	48·3	50·7	·73	NW		8·5
,, 19th	30·445	·419	98	51·1	32·1	41·8	47·2	50·0	·04	W		11·7
,, 26th	29·826	·640	*	45·9	14.2	29·5	41·7	48·4	·50	W, N, NE		13·8
Decem. 3rd	29·895	·379	94	51·3	15·5	38·1	40·7	47·0	·08	NW		13·3
,, 10th	29·505	·257	90	54·2	29·8	39·9	41·8	46·4	·68	SW		11·7
,, 17th	29·620	1·098	87	55·4	27·7	40·6	39·7	45·5	·53	SW		16·5
,, 24th	30·464	·291	*	47·3	22·3	31·7	39·7	45·1	·01	W		15·9
,, 31st	30·201	·593	88	53·8	31·0	38·7	39·8	44·0	·08	SE, NW		18·1

* Frozen. Total Rainfall in the year, 20·52 inches.

TABLE No. 5.—Weekly Returns of Deaths in the Sub-Districts.

EAST SUB-DISTRICT.

Week ending		January				February				March				April					May				June				July				August				Septem.				October				November				December					1904.
		9	16	23	30	6	13	20	27	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	Totals.
Measles	Uuder 5 yrs	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	Under 5 yrs.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	4
	5 & upwards	..	..	..	..	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	5
Whooping Cough	Under 5 yrs.	..	..	..	1	..	..	1	2	2	1	..	3	2	4	2	1	1	..	1	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	26
	5 & upwards	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Diphtheria	Under 5 yrs.	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	1	1	..	6
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Enteric Fever	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	5 & upwards	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	6
Diarrhœal Diseases	Under 5 yrs	..	1	..	..	..	2	..	..	2	1	..	1	1	1	..	..	..	..	..	1	2	..	..	1	..	..	1	..	1	3	6	11	13	15	5	6	9	6	3	4	5	1	1	1	..	1	..	..	1	1	1	..	108
	5 & upwards	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	2	2	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	13
Phthisis	Under 5 yrs.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	5 & upwards	..	..	1	1	..	1	1	2	..	..	2	1	1	1	..	..	..	2	3	..	2	1	2	..	2	..	2	..	1	2	..	..	2	..	..	1	..	..	..	1	..	1	2	2	1	..	1	3	1	..	..	..	..	43
Respiratory Diseases	Under 5 yrs	4	2	1	2	..	3	4	1	1	..	..	1	1	4	5	2	1	..	1	..	..	2	3	..	..	1	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	1	1	..	1	2	2	..	5	1	3	59
	5 & upwards	4	1	3	..	3	2	2	1	2	2	2	..	3	3	3	1	..	..	2	2	..	..	1	..	1	..	2	..	1	..	1	..	..	..	..	..	1	..	..	..	2	1	2	..	..	..	..	3	3	1	3	1	..	59

WEST SUB-DISTRICT.

Week ending		January				February				March				April					May				June				July				August				Septem.				October				November				December					1904.
		9	16	23	30	6	13	20	27	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	Totals.
Measles	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2
Whooping Cough	Under 5 yrs.	..	..	..	..	..	..	1	1	2	..	1	4	2	2	6	1	..	..	1	..	2	1	..	1	..	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	31
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Diphtheria	Under 5 yrs.	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	1	..	..	..	..	1	..	..	..	..	..	..	1	6
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	5
Enteric Fever	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	5 & upwards	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	6
Diarrhœal Diseases	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2	6	10	8	8	6	4	6	3	2	1	..	1	..	..	..	1	..	1	..	..	1	66
	5 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Phthisis	Under 5 yrs.	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	5 & upwards	1	2	2	1	2	2	1	..	1	1	2	..	1	1	2	..	..	1	..	..	..	1	..	1	..	..	..	1	..	..	1	1	1	..	..	1	2	..	..	..	2	2	1	..	1	..	..	..	1	..	2	3	1	42
Respiratory Diseases	Under 5 yrs.	1	2	1	3	2	..	..	1	..	2	1	1	1	4	2	2	2	..	..	..	..	2	..	1	2	..	1	..	..	..	1	1	..	..	..	2	..	..	1	..	1	..	2	..	2	..	3	1	2	3	2	1	1	1	55
	5 & upwards	..	3	2	5	2	2	2	5	..	3	1	2	1	1	..	2	2	1	..	..	..	1	3	2	..	1	1	1	2	..	1	1	1	..	..	1	..	..	..	..	..	1	1	1	1	1	1	2	1	2	1	2	4	67

TABLE No. 6.—Quarterly Births and Deaths during 1904.

	Quarters.	East Sub-District, 40,635.					West Sub-District, 57,965.					Borough, 98,268.				
		1st	2nd	3rd	4th	Year.	1st	2nd	3rd	4th	Year.	1st	2nd	3rd	4th	Year.
BIRTHS.	Males	169	176	137	152	634	235	242	181	197	855	404	418	318	349	1489
	Females ...	182	160	156	151	649	219	210	198	159	786	401	370	354	310	1435
	Total	351	336	293	303	1283	454	452	379	356	1641	805	788	672	659	2924
	Rate	34·7	33·2	28·9	29·9	31·7	31·4	31·3	26·2	24·6	28·4	32·9	32·2	27·4	26·9	29·8
DEATHS.	Males	97	90	86	70	343	111	72	104	81	368	208	162	190	151	711
	Females ...	94	61	108	93	356	88	91	88	92	359	182	152	196	185	715
	Total	191	151	194	163	699	199	163	192	173	727	390	314	386	336	1426
	Rate	18·9	14·9	19·2	16·1	17·3	13·8	11·3	13·3	12·0	12·6	15·9	12·8	15·8	13·7	14·6
	65 years and upwards	39	25	31	32	127	52	30	33	45	160	91	55	64	77	287
	Under 1 year ...	52	44	86	48	230	46	49	83	38	216	98	93	169	86	446
	1—5 years ...	26	29	25	21	101	25	25	22	22	94	51	54	47	43	195
	Zymotics (7) ...	27	18	85	26	156	14	21	55	19	109	41	39	140	45	265
	Rate	2·7	1·8	8·4	2·6	3·9	0·9	1·5	3·8	1·3	1·9	1·7	1·6	5·7	1·8	2·7
	Small Pox ...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
	Measles... ...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever ...	5	2	...	2	9	...	2	1	2	5	5	4	1	4	14
	Whooping Cough...	14	13	...	1	28	11	15	4	2	32	25	28	4	3	60
	Diphtheria ...	1	...	1	5	7	1	1	2	7	11	2	1	3	12	18
	Enteric Fever ...	2	2	...	2	6	2	...	2	2	6	4	2	2	4	12
	Diarrhœa ...	5	1	84	16	106	...	3	46	6	55	5	4	130	22	161
	Influenza ...	2	...	1	2	5	6	1	...	2	9	8	1	1	4	14
	Phthisis ...	11	15	7	11	44	17	7	7	13	44	28	22	14	24	88
	Respiratory Diseases	45	32	8	33	118	43	30	13	36	122	88	62	21	69	240
	Uncertified ...	...	...	...	1	1	1	3	1	2	7	1	3	1	3	8
	Inquests ..	14	12	14	13	53	19	12	12	11	54	33	24	26	24	107
Deaths in Public Institutions	General Hospital ...	...	...	...	...	...	...	...	...	...	...	48	48	55	35	186
	Borough Infectious Hospital	...	...	...	...	...	...	...	...	...	...	2	4	1	5	12
	Other Institutions ...	...	...	...	...	...	...	...	...	...	...	1	1	5	1	8
	From outside the Borough ..				...						...	28	24	22	29	103

TABLE No. 7.

DEATHS in the Sub-Districts during 1904, classified according to Ages and Diseases.

No	DISEASES.	EAST SUB-DISTRICT. Ages. 0—	1—	5—	15-	25-	65-	75-	All Ages.	WEST SUB-DISTRICT. Ages. 0—	1—	5—	15-	25-	65-	75-	All Ages.
	ALL CAUSES ..	230	101	29	29	183	77	50	699	216	94	21	31	205	77	83	727
2	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Scarlet Fever	..	4	5	..	..	..	..	9	..	3	2	..	..	..	..	5
5	Epidemic Influenza	..	..	..	..	2	3	..	5	2	1	..	..	2	2	3	10
6	Whooping Cough	10	16	2	..	..	..	..	28	11	20	1	..	..	..	..	32
7	Diphtheria	..	6	..	1	..	..	..	7	1	5	5	..	..	..	..	11
8	Enteric Fever	..	..	1	3	2	..	..	6	..	..	..	1	5	..	..	6
10	Diarrhœa, Dysentery	12	2	..	..	3	3	1	21	14	3	..	..	..	1	..	18
11	Epidemic Enteritis	63	19	3	..	..	..	..	85	32	5	..	..	..	..	..	37
18	Syphilis	..	..	..	..	1	..	..	1	..	1	1	..	..	..	..	2
22	Puerperal Fever	..	..	..	..	2	..	..	2	..	..	..	1	2	..	..	3
23	Pyæmia	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
24	Infective Endocarditis	..	..	1	..	..	..	..	1	..	..	..	1	..	..	..	1
27	Rheumatic Fever	..	..	..	..	..	1	..	1	..	..	1	1	..	1	..	3
29	Tuberculosis of Brain	1	5	2	..	1	..	..	9	..	5	1	..	1	..	..	7
31	Phthisis	..	1	1	10	32	..	..	44	2	..	..	9	32	1	..	44
32	Abdominal Tuberculosis ..	3	5	..	..	..	..	..	8	3	..	..	..	1	..	..	4
34	Other forms Tuberculosis ..	1	5	2	3	1	..	..	12	2	3	3	2	4	..	..	14
40	Improper Feeding	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
42	Chronic Alcoholism	..	..	..	..	2	..	..	2	..	..	..	..	1	..	..	1
43	Chronic Lead Poisoning ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
45	Osteo-arthritis	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	3
47	Cancer	..	..	..	..	18	5	3	26	..	1	..	..	29	7	6	43
48	Diabetes Mellitus	..	..	..	..	2	2	..	4	..	..	..	..	..	..	1	1
49	Purpura Hæmorrhagica ..	..	..	..	..	..	..	..	..	:	..	1	..	..	..	..	1
51	Anæmia	..	..	..	1	1	..	..	2	..	..	..	2	1	1	..	4
52	Lymphadenoma	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
53	Premature Birth	23	..	..	..	..	..	..	23	28	..	..	..	..	..	..	28
54	Injury at Birth	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1
55	Debility at Birth	30	..	..	..	..	..	..	30	31	..	..	..	..	..	..	31
56	Atelectasis	2	..	..	..	..	..	..	2	2	..	..	..	..	..	..	2
57	Congenital Defects	3	..	..	..	..	..	..	3	4	..	..	..	..	..	..	4
59	Atrophy, Debility, Marasmus ..	5	..	.	..	..	..	..	5	11	..	..	..	..	..	..	11
60	Dentition	3	2	..	..	..	..	..	5	1	2	..	..	..	..	..	3
61	Rickets	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	1
62	Old Age, Senile Decay	..	..	..	..	5	8	26	39	..	..	..	..	..	16	40	56
63	Convulsions	3	1	..	..	..	..	..	4	15	2	..	..	..	..	..	17
64	Meningitis	3	2	1	..	..	..	..	6	5	10	..	1	..	..	..	16
66	Apoplexy	..	..	..	..	..	..	1	1	..	..	..	..	5	2	3	10
67	Softening of Brain	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
68	Hemiplegia	..	..	..	1	2	2	2	7	..	..	..	..	2	2	..	4
70	Insanity	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	1
72	Cerebral Tumor	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
73	Epilepsy	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..	5
75	Locomotor Ataxy	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
76	Paraplegia	..	..	..	..	2	2	..	4	..	..	..	..	1	..	..	1
77	Other forms, Nervous Diseases ..	..	..	..	..	4	3	1	8	..	1	..	1	8	3	..	13

TABLE No. 7 (continued).

No.	DISEASES.	EAST SUB-DISTRICT. Ages. 0—	1—	5—	15-	25-	65-	75-	All Ages.	WEST SUB-DISTRICT. Ages. 0—	1—	5—	15-	25-	65-	75-	All Ages.
82	Endocarditis	..	1	2	2	23	9	3	40	..	..	..	3	21	4	3	31
85	Aneurism	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
86	Senile Gangrene	..	..	..	..	1	1	..	2	..	..	..	..	..	..	1	1
90	Cardiac Failure	..	..	..	..	6	3	..	9	..	..	..	..	5	5	7	17
	Cerebral Hæmorrhage	..	..	1	..	5	1	..	7	..	..	..	..	5	5	4	14
91	Laryngitis	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2
94, 95	Bronchitis	24	10	..	..	13	19	5	71	16	13	1	1	24	13	8	76
98	Pneumonia	11	13	2	6	8	3	2	45	11	12	..	2	13	2	..	40
99	Emphysema, Asthma	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
100	Pleurisy	1	..	..	..	..	1	..	2	..	..	..	..	1	..	..	1
101	Other Diseases, Respiratory System	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	2
102	Stomatitis	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1
103	Diseases of Pharynx	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1
105	Ulcer of Stomach and Duodenum	..	..	..	..	1	..	..	1	..	..	..	..	1	..	1	2
106	Other Diseases of Stomach	4	2	..	..	..	1	1	8	..	1	..	1	2	1	..	5
107	Enteritis	8	3	2	..	..	1	..	14	12	..	..	..	1	..	..	13
108	Appendicitis	..	..	1	..	..	..	..	1	..	..	..	1	..	1	..	2
109	Obstruction of Intestine	..	..	..	..	3	1	..	4	1	..	1	1	2	1	1	7
111	Cirrhosis of Liver	..	..	..	..	5	1	..	6	..	..	..	..	7	..	1	8
112	Other Diseases of Liver	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	3
113	Peritonitis	2	..	..	..	1	1	..	4	..	..	..	..	1	..	..	1
116	Nephritis	..	2	1	..	13	1	1	18	..	..	1	1	6	2	1	11
118	Calculus	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2
119	Diseases of Bladder and Prostate	..	..	..	..	..	1	1	2	..	..	..	..	..	2	1	3
120	Other Diseases, Urinary System	..	..	..	..	1	1	..	2	..	..	..	..	1	..	..	1
122	Diseases of Ovaries	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
126	Abortion, Miscarriage	..	..	..	..	2	..	..	2	..	..	..	..	1	..	..	1
128	Puerperal Convulsions	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
129	Flooding	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..
131	Other Diseases, Pregnancy and Child-birth	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	1
132	Arthritis, Ostitis, Periostitis	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
133	Other Diseases, Osseous System	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
136	Pemphigus	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
	Accidents and Negligence.																
139	In Vehicular Traffic	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..
143	By Machinery	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
145	Burns and Scalds	1	1	..	..	2	1	1	6	1	1	..	..	1	1	..	4
150	Drowning	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
151	Suffocation, Overlaid in Bed	7	..	..	..	..	..	..	7	3	..	..	..	..	..	..	3
152	,, Otherwise	3	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..
153	Falls not specified	..	..	1	..	2	2	..	5	..	..	..	..	2	..	1	3
155	Otherwise	..	..	..	..	2	..	..	2	..	1	1	..	..	1	..	3
156	Homicide	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
	Suicides.																
160	By Drowning	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
168	Ill-defined and unspecified causes	2	..	..	..	5	1	..	8	3	..	..	..	1	1	..	5

TABLE No. 8.—Eleven Years' Annual Deaths, &c.

	1894	1895	1896*	1897	1898	1899	1900	1901	1902*	1903	1904	A
Small Pox	5	...	...	...	...	...	1	...	...	1	...	0·7
Measles	73	40	8	49	19	2	76	48	21	56	...	39·2
Scarlet Fever	55	34	21	24	20	6	9	10	15	14	14	20·8
Whooping Cough	28	53	28	39	9	21	70	29	25	7	60	30·9
Diphtheria	33	84	55	58	43	21	10	13	18	10	18	34·5
Enteric Fever	17	18	37	21	20	44	39	17	15	16	12	24·4
Diarrhœa	62	135	131	188	174	132	117	109	72	86	161	120·6
Seven Zymotics	314	437	312	402	330	293	389	282	166	190	265	311·5
Rate per 1,000	3·7	5·0	3·5	4·5	3·6	3·2	4·2	3·0	1·7	2.0	2·7	3·44
Phthisis	133	110	89	103	105	111	110	98	102	86	88	104.7
Respiratory	387	443	361	324	319	374	444	248	334	285	240	351·9
65 years and upwards ..	293	375	309	285	315	367	383	302	344	314	287	328·7
Under 1 year	484	659	561	671	634	575	622	487	420	414	446	552·7
1—5 years	310	353	220	308	232	209	301	193	199	185	195	251·0
Under 1 year, per 1,000 births	167	217	185	219	202	184	207	162	137	141	152	182·1

* These years contain 53 weeks. A—Annual averages for the ten years preceding 1904.

TABLE No 9. (being Table I, L.G.B.)

Vital Statistics during 1904 and 23 previous years.

Year.	Population estimated to middle of each year	Births.		Deaths belonging to the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents occurring outside the District.	Total Deaths Registered.	
				Under 1 year of age.		At all Ages.						
		Number	Rate.	Number	Rate per 1,000 Births regist'd	Number	Rate.				Number	Rate.
1	2	3	4	5	6	12	13	9	10	11	7	8
*1881	75,932	2769	35·9	410	148	1552	20·1	272	96	..	1648	21·3
1882	76,596	2762	36·1	433	156	1634	21·4	266	79	..	1713	22·4
1883	77,266	2804	36·4	419	149	1542	20·0	329	101	..	1643	21·3
1884	77,942	2691	34·6	509	189	1734	22·3	287	123	..	1857	23.9
*1885	78,624	2806	35·1	390	138	1564	19·5	322	106	..	1670	20·9
1886	79,311	2803	35·4	490	174	1701	21·5	301	121	..	1822	23·0
1887	80,005	2675	33·5	469	175	1664	20·8	329	128	..	1792	22·4
1888	80,705	2674	33·2	445	166	1595	19·8	295	117	..	1712	21·2
1889	81,411	2666	32·8	479	179	1620	19·9	291	119	..	1739	21·4
*1890	82,124	2735	32·8	477	174	1772	21·2	364	136	..	1908	22·8
1891	82,932	2820	34·1	531	188	1914	23·1	351	122	..	2036	24·6
1892	84,022	2805	33·5	482	171	1716	20·5	308	125	..	1841	22·0
1893	85,126	2902	34·2	600	206	1853	21.8	398	137	..	1990	23·4
1894	86,244	2889	33·6	484	167	1719	20·0	392	124	..	1843	21·4
1895	87,377	3027	34·7	659	217	2069	23·7	404	138	..	2207	55·3
*1896	88,525	3023	33·6	561	185	1740	19·3	329	121	..	1861	20·7
1897	89,688	3054	34.2	671	219	1900	21·2	371	127	..	2027	22·7
1898	90,866	3140	34·7	634	202	1845	20·4	373	145	..	1990	20·0
1899	92,060	3113	33.9	575	184	1908	20·8	420	138	..	2044	22·3
1900	93,270	2997	32·2	622	207	1993	21·4	448	188	..	2181	23·5
1901	94,495	3000	31·9	487	162	1577	16·7	356	132	..	1709	18·1
*1902	95,736	3073	31·6	420	137	1575	16·2	392	148	..	1723	17·7
1903	96,994	2943	30·4	414	141	1465	15·2	382	168	..	1633	16·9
Averages for years 1894-1903	91,525	3025	33·1	553	182	1779	19·5	387	143	..	1922	21·1
1904	98,268	2924	29·8	446	152	1426	14·6	206	103	60	1469	15·0

* These years contain 53 weeks. Area of District in acres, 3,525.

Census, 1901.
- Total Population at all ages 94,187
- Number of Inhabited Houses 19,285
- Average number of persons per house .. .. 4·9

Institutions within the Borough receiving sick and infirm persons from without the Borough—the Wolverhampton and Staffordshire General Hospital; the Wolverhampton Borough Hospital; the Wolverhampton Eye Infirmary; the Wolverhampton and District Hospital for Women; the Victoria Nursing Institution.

TABLE No. 10.

(Which includes Table II., L.G.B.)

Year.	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	Population estimated to middle of each Year.	Births.		Deaths.				Population estimated to middle of each year.	Births.		Deaths.			
		Number.	Rate.	At all ages.		Under 1 year of age			Number.	Rate.	At all ages.		Under 1 year of age	
				Number.	Rate.	Number.	Rate per 1,000 Births regist'd.				Number.	Rate.	Number.	Rate per 1,000 Births regist'd.
	a	*b*		*c*		*d*		*a*	*b*		*c*		*d*	
1884	38,748	1382	35·8	981	25·4	275	199	39,146	1309	33·5	753	19·3	231	176
*1885	38,791	1451	36·8	844	21·4	210	145	39,779	1355	33·5	720	17.8	178	131
1886	38,834	1464	37·8	955	24·6	271	185	40,423	1339	33·2	746	18.5	218	163
1887	38,876	1399	36·1	944	24·3	294	210	41,077	1276	31·2	720	17·5	174	136
1888	38,919	1408	36·3	827	21·3	254	180	41,741	1266	30·4	768	18·5	118	149
1889	38,962	1417	36·5	883	22·7	270	190	42,417	1249	29·5	737	17·4	209	167
*1890	39,005	1403	35·4	977	24·6	270	192	43,103	1332	30.4	795	18·1	207	155
1891	39,067	1507	38·7	1026	26·3	310	206	43,856	1313	30·0	888	20·3	220	168
1892	39,190	1493	38·2	935	23·9	273	183	44,794	1312	29.4	781	17·5	209	159
1893	39,312	1497	38·2	1040	26·5	360	240	45,752	1405	30·8	813	17·8	240	171
1894	39,435	1487	37·8	975	24·8	276	186	46,730	1402	30·1	744	16·0	208	148
1895	39,559	1505	38·2	1106	28.0	383	254	47,729	1522	32·0	963	20·2	276	181
*1896	39,683	1595	39·6	899	22·3	310	194	48,750	1428	28·8	841	17·0	251	176
1897	39,807	1543	38·9	1022	25·7	363	235	49,792	1511	30·4	871	17·7	303	204
1898	39,931	1561	39·2	951	23 9	354	227	50,856	1579	31·2	894	17·6	280	177
1899	40,057	1508	37·8	1030	25·8	310	206	51,944	1605	31 0	878	16·9	265	165
1900	40,182	1404	35·1	1030	25·7	318	226	53,054	1593	30·1	963	18·2	304	191
1901	40,307	1408	35·5	800	19·9	271	192	54,188	1592	29·5	777	14·4	216	136
*1902	40,434	1434	34·9	818	19·9	235	164	55,347	1639	29·2	757	13·5	185	113
1903	40,654	1337	33.0	722	17·8	220	165	56,550	1606	28·5	743	13·2	194	121
Averages for years 1894-1903.	40,005	1478	37·0	935	23·4	304	205	51,494	1548	30·1	844	16·5	249	161
1904	40,635	1283	31·7	699	17·3	230	179	57,965	1641	28·4	727	12·6	216	132
Census, 1901. Population	40,696							53,491						
Number of Inhabited Houses	7,984							11,293						
Number of Persons per house	5·1							4·7						

At the beginning of 1903 the dividing line between the Sub-Districts was altered; the alteration affects the 1901 census by transferring 418 from the West population to the East, and so far vitiates the comparison with previous years. Another result is that until the next census the estimated East population will be a diminishing one.

* These years contain 53 weeks.

TABLE No. II.

Birth Rates and various Death Rates in 33 of the largest English Towns for 52 weeks ending 31st December, 1904.
Compiled from the Registrar-General's Returns.

Name of Town.	Population.	Birth-rate.	Death-rate.	Death-rates from							Deaths under one year per 1,000 birthd.
				Small-pox.	Measles.	Scarlet Fever.	Diph-theria.	Whoop-ing Cough.	Fever.	Diar-hœa.	
London	4,648,950	27·9	17·5	0·01	0·49	0·08	0·16	0·33	0·06	1·04	146
Croydon	144,419	26·0	14·2	—	0·42	0·05	0·17	0·10	0·04	0 64	130
West Ham	288,424	32·3	17·6	—	0·60	0·14	0·15	0·35	0·11	2·68	162
Brighton	126,286	23·5	16·4	—	0·72	0·02	0·12	0·29	0·06	0·43	134
Portsmouth	198,038	28·3	17·3	—	0·01	0·11	0·36	0·40	0·17	1 08	142
Norwich	115,538	27·6	17·4	—	1·15	0·03	0·07	0·34	0·14	1·18	180
Plymouth	114,003	25·4	18·1	—	0·69	0·32	0·12	0·24	0·14	1·02	172
Bristol	343,204	26·7	16·0	—	0·30	0·11	0·30	0·34	0·08	0·51	134
WOLVERHAMPTON	**98,268**	**29·8**	**16·0**	—	—	**0·15**	**0·18**	**0·60**	**0·13**	**1·65**	**155**
Birmingham	537,965	31·6	21·4	—	0·38	0·12	0·24	0·85	0·07	1·76	197
Leicester	224,186	26·6	15·5	0·02	0·14	0·02	0·03	0·39	0·06	1·31	167
Nottingham	248,811	27·7	18·6	0·05	0·18	0·11	0·28	0·36	0.23	1·37	176
Derby	120,449	27·4	16·5	0·03	0·12	0·03	0·25	0·23	0·06	0 68	143
Birkenhead	114,814	33·2	20·9	0·01	0·90	0·17	0·24	0·73	0·12	1·54	181
Liverpool	723,430	33·7	24·2	—	0·94	0·20	0·27	0·58	0·15	2·52	196
Bolton	175,744	26·8	19·1	0·01	0·07	0·13	0·16	0·75	0·22	0·94	168
Manchester	557,938	31·3	23·8	0·02	0·76	0·15	0·17	0·50	0·12	1·37	187
Salford	228,983	31·8	23·4	0·01	1·11	0·25	0·49	0·62	0·23	1·66	192
Oldham	139,497	24·9	20·5	0·10	0·47	0·15	0·25	0·27	0·16	0·91	156
Burnley	100,569	26·6	22·0	—	1·03	0·13	0·12	0·45	0·19	2·01	229
Blackburn	132,134	23·4	19·1	—	0·48	0·10	0·08	0·73	0·16	0·81	191
Preston	115,055	28·1	21·0	0·06	0·64	0·05	0·20	0·28	0·27	1·43	185
Huddersfield	94,925	23·7	18·8	0·01	0·80	0·11	0·15	0·25	0·08	0 51	136
Halifax	107,580	20·0	16·7	0·08	0·44	0·21	0·16	0·18	0·09	0·34	128
Bradford	285,089	22·1	19·5	0·01	0·52	0·15	0·57	0·17	0·17	0·83	166
Leeds	450,142	28·0	19·7	—	0·76	0·13	0·10	0·47	0·11	0·99	175
Sheffield	432,940	32·0	18·1	—	0·08	0·20	0·11	0·34	0·12	1·35	158
Hull	253,865	31·0	19·0	0·02	0·71	0·05	0·25	0·26	0·15	2·08	178
Sunderland	151,157	34·5	20·1	0·01	0·40	0·02	0·18	0·42	0·21	1 09	164
Gateshead	118,067	34·4	19·5	0·29	0·34	0·17	0·12	0·77	0·06	1·13	174
Newcastle	225,362	30·5	20·9	0·08	0·25	0·11	0·22	0·58	0·04	0·51	156
Cardiff	176,313	29·6	16·1	0·01	0·36	0·14	0·18	0·34	0·05	0·72	146
Swansea	95,931	31·3	19·3	—	—	0·15	0·25	1·01	0·05	0·77	174

County Borough of Wolverhampton.

REPORT

OF THE

CHIEF SANITARY INSPECTOR

(JOHN PEERS, R.P. Asso. San. Inst.)

UPON THE

WORK OF THE INSPECTION DEPARTMENT

For the Year 1904.

PRINTED BY ORDER OF THE HEALTH COMMITTEE.

REPORT OF THE CHIEF SANITARY INSPECTOR

FOR THE YEAR 1904.

HEALTH OFFICES,

TOWN HALL,

WOLVERHAMPTON,

May, 1905.

To the Chairman and Members of the Health Committee.

Gentlemen,

I beg to submit you my Report concerning the work of your Inspectorial and Clerical Staff during the year 1904.

This marks the completion of my six years service here, and is also the sixth Annual Report I have submitted to you. This latter circumstance enables me, for the first time, to make comparisons not only between the work of the past and present years respectively, but also permits the convenient period of "five years' average" being taken into account, and I have, therefore, endeavoured to follow this course where practicable.

During this period considerable changes have taken place in the Staff; in fact every year (1903 excepted) has seen some alteration, and this year a vacancy arose in consequence of the resignation of the South-East Sub-district Inspector.

These changes obviously interfere with the District routine work, introducing a considerable amount of disorganisation, and this year the South-East figures are somewhat below the average, in consequence. In 1902 the North-East District suffered from a similar cause, though perhaps to a less marked extent.

Tables A to F appended, give a concise summary of the routine work accomplished during the past year, and the figures are so arranged as to facilitate ready comparisons being made with the work of any previous

year. I have compared the returns with those of 1903, and I find there has been a decrease in the work recorded by each of the District Inspectors. I have also made careful comparisons with the average figures recorded during the past five years, and I find (with a few exceptions) the returns for 1904 do not reach the standard thus set up.

I am unable to offer any sufficient explanation of the deficiencies, and can only hope that they arise in consequence of the commoner sanitary defects not being so apparent as hitherto, consequently the standards attained in the past are somewhat difficult to maintain.

I attach a copy of the Statutory Report to the Local Government Board, relative to the operations under the Provisions of the Canal Boats Acts, &c., and there is also annexed a brief summary of the Quarterly Reports of your Veterinary Inspecort.

GENERAL SANITARY WORK.

BRIEF COMMENTS UPON THE TABLES.

COMPLAINTS.

(Table A.)

534 written complaints were received alleging the existence of Sanitary defects. The number received during 1903 was 622, and the average for the past five years is 542; so that complaints have decreased very slightly below the average, (1·4 %), whereas previously there has been a steady increase year by year.

There is a striking reduction in the number of complaints made in respect of closet pans or ash receptacles. Coupling the complaints and "requests" made in this behalf, the average number received during the past five years have been 2,222, whereas during 1904 the total only reached 923, or 58·5 % less than the average. This, I think, points conclusively to improved methods of those responsible at Crown Street Depot, and the facts deserve to be placed to their credit.

Moreover, an immense improvement appears to have been effected in the methods of refuse collection, whereby the practise of depositing on the roadway instead of directly into the carts has been largely, though not, unfortunately, altogether superseded.

INSPECTIONS.

(Table A.)

34,483 is the total number returned under the heading "Inspections, Re-Inspections, Calls made, &c." by the District Inspectors. This is the lowest number yet recorded, and is 15·8 % below the returns for 1903. Compared wtih the average figures of the past five years, the decrease recorded by each individual Sub-Inspector is as follow:—

N.W., 13 % S.W., 23 % N.E., 15 % S.E., 43 %

The reduction recorded in respect of the S.E. Sub-district tends to emphasise the previous remarks regarding the dis-organization consequent upon a change of Inspectorship.

Taking the more important items of the table seriatim I find :—

Houses Inspected.—2,058 houses have been specially inspected this year; this represents an increase over and above 1903 returns, of 5·8 %. The record is the best since 1899, but is still 5·6 % below the five years' average returns.

Re-inspections, Calls made, &c.—15,277 is the total number returned under this heading, and is the lowest figure yet recorded. It is 16·5 % below the returns in this behalf during 1903, and 19·5 % less than the past five years' average.

These visits at times assume such a varied aspect as to prohibit anything more than a passing reference being made to them here. They embrace all the calls made in connection with outstanding Notices, and the supervision of, and the directions requisite to properly remedy, the immense variety of sanitary defects discovered. They also include the examination and testing necessary in connection with drainage works undergoing re-construction; hence it is obvious that the time absorbed

varies enormously, sometimes hours being necessary to overcome the difficulties frequently presented in connection with complicated systems of drainage. It is easy, therefore, to understand that the number of "Calls, &c." possible will very largely depend upon the nature of the work arising from time to time.

Workshops.—(Inspection of and visits to.—See Table D.)—3,754 represents the number of Inspections, Calls made, &c., in respect of the various workshop premises alone. This work is quite distinct from that of the ordinary district Inspection ; one inspector being engaged his whole time thereon (except for occasional visits he makes in connection with Canal Boats work) ; thus greater attention is being paid to work-places than ever before.

The result of this Inspector's work is clearly set out in Table D referred to, and goes to show that good progress is being accomplished.

Prosecutions ensued in regard to three workshops ; one in respect to defective roof, &c., and two in connection with improper W.C. accommodation.—(See Table F.)

Last year a list was given in connection with the number of workshops on the Registers, and we have no reason to suppose that there has been any material variation in this direction during the past year.

The difficulty referred to in 1903, with regard to "lists of outworkers," has been again experienced, special circulars having to be despatched before the necessary lists could be secured, and even then it was found necessary to interview some few employers.

Bakehouses.—708 visits have been paid to the various bakehouses in the borough, which numbered 104 at the end of last year. This is an increase of 19·4 % upon the number of visits paid to these premises during 1903, but is yet 12·3 % less than the average number of visits made during the past five years.

In July the condition of several bakehouses was made the subject of a report by the Medical Officer of Health, and as a consequence the use of one was prohibited. In another case the occupier was specially cautioned, and in several other instances Notices were served requiring attention to certain sanitary defects found.

Cowhouses, Dairies, and Milk-Shops.—238 visits have been paid to 18 Borough Cow-houses, and 916 to the various Dairies and Milk-shops. The number of the latter premises varies considerably, the average being about 250.

During the year the Veterinary Inspector reports having inspected 748 cows.—(See separate summary dealing with this Inspector's work.

In every respect these returns show satisfactory advance over the 1903 records, but they are still somewhat below the average of the past five years.

Slaughter-Houses.—2,539 visits have been made to the various Slaughter-houses within the Borough. This is by far the best record ever attained in this connection, being 18·8 % better than those of 1903, and 29·4 % better than the average for the past five years. At the end of the year we had 47 Private Slaughter-houses in addition to the Public Abattoirs.

During the year transfers of licenses were granted in eight cases, (one being in respect of a license which had been allowed to lapse). No new license proper was granted, though strenuous efforts were made in one case.

At the close of 1903 a most exhaustive enquiry was made relative to the granting of new licenses in other town; and a lengthy schedule of replies in regard thereto was presented to the Committee early in 1904, whereby it was fully established that the policy throughout the country is in the direction of a reduction of the Private Slaughter-houses, and the provision of Public Abattoirs, preferably, perhaps, of the sectional type.

On the occasion of the annual renewal of licenses, one was refused, one lapsed by arrangement, and one lapsed through disuse—and by order of the Committee, letters regarding the unsuitability of certain premises were issued in nine cases, and every license holder was supplied with a communication relative to his individual use of the licensed premises.

Food Inspection.—2,432 visits have been made in connection with the inspection of "food stuffs" throughout the Borough. This record of that increased vigilance has been exercised in this behalf; the number shows visits being 4·5 % in excess of those made in 1903, and is 20·6 % above the five years' average figures. This is, therefore, a very satisfactory return. A detailed description of the unwholesome, &c., food dealt with during the year is given in Table E. The approximate total weight destroyed was 2 tons 12 cwt. 2 qrs. 17 lbs., and is slightly below the average, which is 2 tons 17 cwt. It is very gratifying to find by far the greater proportion this year has been voluntarily surrendered for destruction, only 13 Justices' Orders being required.

Miscellaneous Inspections.—In addition to the foregoing a large number of special inspections have been made by the Medical Officer of Health and myself. These are not included in the Table. One result of these latter Inspections was the closing (by order of the Council) of 13 cottages unfit for habitation, and the revocation of outstanding Closing Orders in connection with four houses which had been rendered fit for habitation.

SANITARY DEFECTS REPORTED.

(Table B.)

4,851 represents the number of sanitary defects reported by the District Inspectors, and 633 by the Workshops Inspector—total 5,484; as against 5,794 and 580 respectively during 1903, when the total was 6,374. The figures last year were the highest recorded since 1899; whereas this year they are the lowest, being 19 % below the average. Continuing the "average" comparison further the decrease on each respective district is :—

N.W., 12 % S.W., 34 % N.E., 1 % S.E., 20 %

This reduction in defects discovered seems somewhat inconsistent with a reported increase in the nnmber of houses inspected, except for the inference previously referred to as regards the more common defects, peculiar to cottage property, becoming less numerous.

One can only hope that future records may tend to confirm this inference.

Reviewing the items numbered 1 to 36 in the schedule, and comparing the figures with those of a five year's average, I find those showing increases are Nos. 1, 2, 8, 17, 23, 26, 31 and 33.

NOTICES.

(Table B.)

3,745 Notices have been issued in connection with District Inspection work, and 404 in respect of Workshops. Total, 4,149.

Of this number 2,954 were Intimation (Preliminary), and 1,195 duly Authorised Statutory Notices respectively, and in connection with the latter, 403 special circulars were despatched, urging attention to the requirements of such Notices.

1,064 of the 3,785 (28·1 %) Notices issued in reference to District work were against occupiers; and of the 404 Workshop Notices served, 234, or 57·9 % were issued against the tenants.

On referring to our past records of "Notices served" it will be seen that there has been a marked reduction in the figures during the present year. The falling off is very pronounced on every district, and the actual decrease per cent. compared with the average of five years past are :—

N.W., 15 % S.W., 33 % N.E., 20 % S.E., 30 %

These circumstances, in conjunction with the remarks regarding the increase in the number of houses inspected and a decrease in the sanitary defects discovered; all tend to confirm the feeling that the commoner forms of insanitary conditions are becoming less apparent than hitherto, though one rather hesitates to presume too much in this direction from the records furnished in any one year.

Prosecutions.—(Table F.)—In 28 instances resort to Magisterial Proceedings was necessary, as against 20 cases in 1903. The details of each case are set out in the table mentioned.

IMPROVEMENTS.

(Table C.)

The District Inspectors' returns in this direction show that :—

6,313 Improvements have been effected in connection with 3,591 different premises ; and in addition to this the Workshop Inspector has recorded 683 improvements in 433 premises. Totals, 6,996 and 4,024 respectively. This represents the result of our efforts in compliance with Notices served during 1904.

The main details in each case are scheduled in Tables C. and D. respectively.

Last year the figures under this heading constituted almost a record of work done in any one year, and established a standard which it was felt would be difficult to maintain. This year's returns do not reach the standard thus set up, but are nevertheless in many respects satisfactory, except, perhaps, as regards the S.W. and S.E. returns.

Comparing this year's results with the average figures recorded during the past five years, the returns made by the District Inspectors are as follows :—

Sub-district.	Improvements secured.		Premises improved.	
	Decrease.	Increase.	Decrease.	Increase.
N.W.	6·5 %	—	—	3·7 %
S.W.	12·1 %	—	27 %	—
N.E.	—	2·8 %	20 %	—
S.E.	29·5 %	—	29·1 %	—
Borough total ..	Decrease, 10 %		Decrease, 18 %	

Notwithstanding, however, that the above total is somewhat below the average, there has been an appreciable increase recorded in connection with several of the more important items: *e.g.*

In regard to :—

	5 years' average.	Increase during 1904
Water Closets improved or repaired ..	260	8·8 %
Ashpits altered to covered bins	304	21·7 %
Soft water cisterns cleansed	53	54·7 %
Houses cleansed and limewashed	281	10·1 %
.. generally repaired	348	30·8 %
.. Spouting, &c., provided to ..	340	48·2 %

Thus, it will be seen that in the above named important directions, substantial progress has been made.

CANAL BOATS.

Copy of the Report submitted to the Local Government Board (as required by Section III. Canal Boats Act, 1884) showing the work executed by us under the Provisions of the Canal Boats Acts.

CANAL BOATS ACTS, 1877—1884.

BOROUGH OF WOLVERHAMPTON REPORT FOR THE YEAR 1904.

1. The duties of Canal Boat Inspection in this Borough devolve upon the Chief Sanitary Inspector (Mr. John Peers, Health Offices, Town Hall, Wolverhampton) and his Assistants.

   NO SEPARATE REMUNERATION is specified for this work.

2. 308 Boats have been inspected during the year 1904, and on reference to the list of Contraventions discovered a fair index of the condition of the Boats met with may be gathered.

   Practically one boat in every three inspected have been found to be contravening the Acts or Regulations, and it is rather significant that the same ratio between Inspections made and Contraventions discovered obtained during 1903.

As regards the occupants of the Boats, in only a few instances has it been necessary to remonstrate with them regarding cleanliness; they are usually civil, and often courteous in their manner, and ready to supply any information required of them.

3. Infringements discovered and dealt with :—

(*a*)	Registration	—
(*b*)	Notification of change of Master ..	—
(*c*)	Certificates	30
(*d*)	Marking	6
(*e*)	Overcrowding	7
(*f*)	Separation of the Sexes	—
(*g*)	Cleanliness	11
(*h*)	Ventilation	8
(*i*)	Painting	14
(*j*)	Provision of Water Cask	49
(*k*)	Removal of Bilge Water	—
(*l*)	Notification of Infectious Disease ..	—
(*m*)	Admittance of Inspector	—
(*n*)	Cabins damp or leaking	25
	Total	150

4. No legal proceedings have been instituted in connection with Canal Boats during the past year.

5. All infringements discovered have been dealt with by means of the usual Complaint Note or Notices, and in a few instances subsequent letters have been issued where undue delay has been exercised in executing the necessary remedies.

6. No cases of Infectious disease has been reported from a Canal Boat during the year.

7. No boats have been detained for the purpose of cleansing or disinfection.

8. 913 Boats have been entered on the Register since 1878.

9. 10 Boats have been registered during 1904; one being a new boat and the remaining nine being re-registration owing to the change of ownership.

JOHN PEERS,
Chief Sanitary Inspector, and Examining Officer under the Canal Boats Act.

SUMMARY of VETERINARY INSPECTOR'S REPORTS.

The number of Cows inspected during the year ending December 31st, 1904, was 748.

Cases of Udder Affection reported	..	..	8
,, General Turberculosis	..	..	14

Special Remarks.—In cases of udder affection, whether simple or infectious, the Cows are isolated. If the affection results from some slight constitutional ailment, or injury, the Cows are treated and soon recover : the affected quarter or quarters resuming their normal condition. Chronic cases of Mammitis in unthrifty or obviously Tubercular animals are "dried off" and not used again for milking, being removed from their respective dairies.

Particular attention has been given to the general condition of the the Cows, because a Cow which is only slightly affected with general Tuberculosis is a source of danger to other Cows in the same cowshed, and a still greater danger to the milk supply ; as the dried vapour from the breath, in the form of dust upon the litter, gets distributed during the process of milking, and contaminates the milk with dangerous organisms.

From statistics of other large towns, the condition of the Cows in this Borough compares most favourably.

(Signed) JOHN E. CARTWRIGHT, M.R.C.V.S.

March 13th, 1905.

TABLE A.

Public Complaints or Requests received and dealt with.

Complaints in respect of :—Alleged or Suspected Sanitary Defects ..	534
,, ,, Closet Pans or Ash Receptacles ..	170
Requests ,, ,, ,, ,, ..	753
TOTAL	1457

Summary of District Sanitary Inspectors' Routine Work.

	Districts.				Total for Borough
	N.W.	S.W.	N.E.	S.E.	
Investigations made into Notifiable Infectious Diseases	164	215	112	152	643
Investigations made into other Infectious Diseases	106	136	115	132	489
Number of Houses inspected	359	683	661	347	2050
Re-inspection, Calls made, &c.	4696	2658	2064	2340	11758
Inspections of or visits to— *Workshops ..	1	23	—	—	24
,, Bakehouses..	171	339	98	100	708
,, Cowhouses	68	61	4	9	142
,, Dairies and Milkshops ..	444	192	142	138	916
,, Slaughter-houses	369	484	865	821	2539
,, Stables and Stable Yards..	623	633	28	177	1461
,, Courts, Outdoor Closets, Drains, &c.	2167	2296	3154	1211	8828
,, Piggeries, Fowls, and other Animals kept	644	597	240	121	1602
,, Meat and Food	290	495	911	736	2432
Ashpits reported for Clearing	70	54	83	135	342
Dangerous Buildings, Street Gullies, &c.. reported	61	40	102	47	250
Waste of Water	32	22	46	65	165
Miscellaneous	7	4	34	44	89
TOTAL INSPECTIONS, &c... ..	10282	8932	8659	6575	34438

* See table D showing Summary of Workshop Inspector's work.

TABLE B.

Sanitary Defects Reported by District Sanitary Inspectors.

	Sanitary Defects.	Districts.				Total for Borough
		N.W.	S.W.	N.E.	S.E.	
1.	The house or part of the house in a dirty condition ..	51	58	132	87	328
2.	,, ,, ,, ,, damp condition ..	57	54	106	86	303
3.	,, ,, ,, ,, dilapidated condition ..	3	2	8	19	32
4.	,, ,, ,, ,, being overcrowded	6	13	14	28	61
5.	The water closet or waste water closet being foul or offensive	64	57	25	48	195
6.	,, ,, being without a water supply, or with a defective flush of water ..	5	5	3	1	14
7.	,, ,, being improperly constructed ..	10	1	—	—	11
8.	,, ,, or waste-water closet being stopped or partially stopped	40	53	25	49	165
9.	Urinal being improperly constructed or improperly drained	5	5	1	7	18
10.	Closet accommodation being insufficient	2	—	2	6	10
11.	The pail closet being improperly situated	9	1	7	27	44
12.	The privy, midden, or cesspit being a nuisance ..	3	4	2	3	12
13.	The soil pipe defective	12	1	1	1	15
14.	,, ,, unventilated or ill-ventilated ..	6	1	—	—	7
15.	The bath or lavatory being improperly drained ..	1	—	2	—	3
16.	The sink being improperly constructed or drained ..	24	74	52	80	230
17.	The premises being improperly drained or being insufficiently drained	30	16	55	52	153
18.	The drain inlet untrapped or improperly trapped ..	19	11	1	8	39
19.	The drain or drain inlet being foul	58	86	80	70	294
20.	,, being stopped	56	82	70	69	277
21.	The drainage being defective	55	24	32	18	129
22.	The drain being unventilated or ill-ventilated ..	11	9	1	1	22
23.	The rain-water pipe being in direct communication with drain	7	1	1	6	15
24.	The rain-water pipe being defective or stopped ..	21	27	38	38	124
25.	The guttering being defective or eaves being without guttering	41	20	72	43	176
26.	The roof of house being defective	13	22	38	38	111
27.	The soft-water cistern being foul	6	6	10	4	26
28.	The floor of yard, or court, or closet being in an insanitary condition for want of proper paving ..	44	36	36	28	144
29.	The walls or floors of outbuildings, (yard, court, washhouse or closet) being foul	100	99	159	88	446
30.	The outbuildings being dilapidated	22	37	40	43	142
31.	The ash receptacle being defective or foul	76	71	103	95	345
32.	The premises being without proper or sufficient ash accommodation	79	54	40	41	214
33.	The premises being without a proper manure receptacle	23	9	23	1	56
34.	An animal or animals kept	32	34	61	43	170
35.	An accumulation of offensive matter	41	47	54	35	177
36.	The urinal being foul or offensive	26	11	4	4	45
	Miscellaneous	63	41	136	58	298
	Totals	1121	1072	1434	1224	4851

Notices served dealing with the above-named Sanitary Defects.

Form of Notice	Districts.				Total for Borough
	N.W.	S.W.	N.E.	S.E.	
Intimation (Preliminary)	609	623	779	640	2651
Statutory	286	222	335	251	1094
Totals ..	895	845	1114	891	3745

TABLE C.

Improvements made in Compliance with Notices served.

		Districts.				Total for Borough
		N.W.	S.W.	N.E.	S.E.	
Drains	Reconstructed	51	35	44	15	145
	Improved or Repaired	147	232	101	79	559
	Traps fixed	221	170	167	70	628
Cesspools	Abolished	1	1	—	—	2
Privy Middens	Ditto	—	—	—	2	2
Privies Altered to	Waste Water Closets	2	2	—	5	9
	Water Closets	6	—	—	7	13
Water Closets	Constructed	18	7	4	4	33
	Improved or Repaired	123	99	12	49	283
Ashpits	Ash Bins provided	253	264	228	100	845
	Altered to Bin	93	125	108	44	370
	Improved or Repaired	6	14	5	1	26
Courts, Yards, and Channels	Relaid or Repaved	123	149	59	24	355
Water	Wells Closed	—	1	4	1	6
	Water laid on	—	8	6	—	14
	Soft Water Cisterns Cleansed	14	52	7	9	82
Houses	Cleansed or Limewashed	55	110	86	59	310
	Generally Repaired	27	182	81	58	348
	Lighted or Ventilated	5	3	9	—	17
	Spouting, etc., provided to	139	128	167	70	504
Overcrowding Abated		4	14	24	23	65
Out-door Premises Limewashed or Repaired		271	258	259	70	858
Animals Removed		37	42	40	11	130
Offensive Accumulations Removed		77	200	70	27	374
Other Amendments or Nuisances Abated		201	6	80	48	335
Total Improvements		1874	2102	1561	776	6313
Total Premises Improved		1131	1095	860	505	3591

Disinfection.

Number of houses disinfected	327
,, Canal Boat Cabins disinfected	—
,, Articles disinfected in Steam Disinfector	7347
,, ,, ,, by Sulphurous Fumes	389

TABLE D.
Summary of Workshop Inspector's Work.

Complaints received and dealt with, from H.M. Inspector of Factories	18
,, ,, ,, ,, from other sources	26
TOTAL	44

*Workshops Inspected	211
Re-inspections, calls made, etc.	3519
TOTAL	3730

Sanitary Defects Reported.

1. The Workshop being in a dirty condition	127
2. ,, ,, ,, damp condition	21
3. ,, ,, ,, dilapidated condition or without sufficient light or ventilation	26
4. The Workshop being overcrowded	3
5. The water closet or waste water closet being foul or offensive	36
6. The water closet being without a water supply, or with a defective flush of water	6
7. The water closet being improperly constructed	2
8. The water closet or waste water closet being stopped or partially stopped	9
9. Urinal being improperly constructed or improperly drained	10
10. Closet accommodation being insufficient or unsuitable	17
11. The pail closet being improperly situated	11
12. The privy, midden, or cesspit being a nuisance	6
13. The soil pipe defective	2
14. ,, ,, unventilated or ill-ventilated	2
15. The bath or lavatory being improperly drained	4
16. The sink being improperly constructed or drained	21
17. The premises being improperly drained or being insufficiently drained	9
18. The drain inlet untrapped or improperly trapped	10
Carried forward	322

Brought forward	322
19. The drain or drain inlet being foul	16
20. ,, being stopped	14
21. The drainage being defective	9
22. The drain being unventilated or ill-ventilated	1
23. The rain-water pipe being in direct communication with drain	2
24. The rain-water pipe being defective or stopped	13
25. The guttering being defective or eaves being without guttering	22
26. The roof of workshop being defective	15
27. The soft-water cistern being foul	1
28. The floor of the workshop or yard being in an insanitary condition for want of proper paving	12
29. The walls or floors of outbuildings (yard, court, washhouse, or closet) being foul	17
30. The outbuildings being dilapidated	11
31. The ash receptacle being defective or foul	30
32. The premises being without proper or sufficient ash accommodation	37
33. The premises being without a proper manure receptacle	2
34. An animal or animals kept	10
35. An accumulation of offensive matter	17
36. The urinal being foul or offensive	11
Miscellaneous	71
TOTAL	633

Notices Served, dealing with the above-named Defects.

Intimation (Preliminary) Notices	303
Statutory Notices	101
TOTAL	404

Improvements made in compliance with the aforesaid Notices.

Drains	Reconstructed	15
	Improved and Repaired	20
	Traps fixed	90
Cesspools	Abolished	—
Privy Middens	ditto	—
Privies Altered to Water Closets	Waste Water Closets	—
	Water Closets	37
	Constructed	12
	Improved or Repaired	15
Ashpits	Ash Bins provided	44
	Altered to Bin	23
	Improved or Repaired	4
Workshop and other Surfaces	Relaid or Repaved	2
Carried forward		262

Brought forward		262
Water	Wells Closed	—
	Water laid on	—
	Soft Water Cisterns Cleansed	—
Workshops	Cleansed or Limewashed	111
	Generally Repaired	19
	Lighted or Ventilated	19
	Spouting, etc., provided to	16
Overcrowding Abated		3
Outdoor Premises Limewashed or Repaired		48
Animals Removed		11
Offensive Accumulations Removed		27
Other Amendments or Nuisances Abated		167
TOTAL IMPROVEMENTS		683
TOTAL PREMISES IMPROVED		433

*Also inspected 97 Canal Boats.

TABLE E.

Unwholesome Food Destroyed.

Voluntarily Surrendered and Destroyed.		Condemned and Destroyed by Justice's Order.	
Nature of Article.	Why Destroyed.	Nature of Article.	Why Destroyed.
Carcases of 4 Calves ..	Suffocated	Carcase of 1 Cow ..	Diseased
,, 3 Sheep ..	,,	,, 1 Lamb ..	Unsound
,, 3 Pigs ..	Diseased	,, 2 Pigs ..	Diseased
,, 11 ,, ..	Suffocated	,, 2 Pigs ..	Suffocated
,, 3 ,, ..	Unsound	Livers of 1 Ox ..	Diseased
Livers of 6 Oxen ..	Diseased	,, 1 Cow ..	,,
Lungs of 3 ,, ..	,,	,, 1 Pig ..	,,
,, 12 Cows ..	,,	Lungs of 2 Pigs ..	,,
Livers of 7 ,, ..	,,	Head of 1 Pig ..	,,
,, 13 Sheep ..	,,	Forequarters & internal organs of Sheep	,,
Lungs of 40 ,, ..	,,	Small quantities of .—	
Hearts of 10 Pigs ..	,,	Gooseberries ...	Unsound
Spleen of 2 ,, ..	,,	Apples ..	,,
Lungs of 17 ,, ..	,,		
Livers of 29 ,, ..	,,		
Head of 1 ,, ..	,,		
Several pieces of Beef, Veal and Pork	Bruised and Unsound		
11 Loins of Pork ..	Unwholesome		
24 Hares ..	Unsound		
70 Rabbits ..	,,		
16 ,, Livers ..	Diseased		
2 cases Fish ..	Unsound		
1 ,, Mackerel ..	,,		
1 box Herring ..	,,		
Small quantity of Bananas			
,, ,, Oranges			
,, ,, Pears ..			

13 Justices' Orders have been obtained in connection with these articles.

	Tons.	Cwts.	Qrs.	lbs.
Approximate Weight Surrendered	2	0	1	11
,, ,, Seized		12	1	6
Total	2	12	2	17

TABLE F,

PROSECUTIONS.

PREMISES.	NATURE OF OFFENCE.	RESULT.
Workshop, Inkerman Street	Non-compliance with Statutory Notices, re—Roof and Windows of Workshop being defective	After one adjournment Order made for the work to be done within one month, defendant to pay costs, 14/6
Court 7, Duke Street	Non-compliance with Statutory Notice, re—Drainage and W.W.C. being choked	Summons withdrawn, work completed, defendant to pay costs, 4/6
299, Great Brickkiln Street	Non-compliance with Statutory Notice, re—Fowl and Ducks being kept	Ditto
5 to 8, Lower Villiers Street	Non-compliance with Statutory Notice, re—Premises being without ash accommodation	Ditto
18-19, ditto	Ditto	Ditto
23-24, ditto	Ditto	Ditto
93-94, Lowe Street	Non-compliance with Statutory Notice, re—Drainage being defective and drain inlet being untrapped	Order made for the work to be carried out within 14 days, defendant to pay costs, 10/6
9, Albion Street	Non-compliance with Statutory Notice, re—Defective guttering and foul interior walls and ceilings	After one adjournment summons withdrawn, work being completed, and defendant paying costs, 4/6
76 to 80, Wednesfield Road	Non-compliance with Statutory Notice, re—Pail closets being improperly situated, sink structures being defective, roofs of houses defective, drainage being defective, and ashpit being open and foul	Order made for the work to be executed within one month, defendant to pay costs, 12/6
82 to 84, ditto	Ditto	After two adjournments summons withdrawn, work completed, and defendant paying costs, 4/6
Workshop, Shepherd Street	Non-compliance with Statutory Notice, re—Premises being without suitable and sufficient accommodation in the way of sanitary conveniences	After two adjournments defendant fined 10/- and cost 13/-
1B and 1C, Brunswick Street	Non-compliance with Statutory Notice, re—Privy middens being a nuisance	Order made for the work to be done within one month, defendant to pay costs, 10/6
Court 13, Faulkland Street	Non-compliance with Statutory Notice, re—Eaves, guttering, and rain-water pipes being defective, and roof of outbuildings defective	After one adjournment summons withdrawn, work being completed

TABLE F *(continued).*

PREMISES.	NATURE OF OFFENCE.	RESULTS.
21 to 26, Graiseley Row	Non-compliance with Statutory Notice, re—Sinks being improperly drained, premises insufficiently drained and without proper ash accommodation	After two adjournments summons withdrawn, work being completed, and defendant paying costs, 6/-
68, Shepherd Street	Non-compliance with Statutory Notice, re—Interior walls and ceilings being foul	After one adjournment summons withdrawn, work being completed, and defendant paying costs, 4/6
48, Charles Street	Non-compliance with Statutory Notice, re—Eaves, guttering, and rain-water pipes being defective	After one adjournment summons withdrawn, work completed, and defendant paying costs, 6/-
66, Shepherd Street	Non-compliance with Statutory Notice, re—Pigeons being kept	After one adjournment summons withdrawn, pigeons removed, and defendant paying costs, 4/6
76-80, Wednesfield Road	Disobeying Magistrates' Order, re—Defective drainage, sinks, roofs, &c.	Defendant fined 10/- and costs 8/-, or 14 days' imprisonment
Court 1, Oxford Street	Continuing to occupy a condemned house	Summons withdrawn, house vacated
Ditto	Ditto	Ditto, defendant to pay costs, 8/-
23, Queen Street	Non-compliance with Statutory Notice, re—Improperly constructed and defective W.C., also sink being improperly drained	Order made for the work to be executed in 14 days, defendant to pay costs, 13/6
76 to 80, Wednesfield Road	Disobeying Magistrates' Order, re—Defective drains, sinks, &c.	Application for an order to close the premises refused
3 and 4, Little's Lane	Non-compliance with Statutory Notice, re—Ashpit being open and foul, and soft-water cistern being foul	Order made requiring the abatement of the nuisance fortwith, defendant to pay costs, 23/-
37, Bilston Street	Conveying infectious person in public vehicle	Prosecution withdrawn on defendant paying costs £2 7s. 6d.
78 to 80, Salop Street	Non-compliance with Statutory Notice, re—W.W.C. being choked and foul	Summons withdrawn on payment of costs, 14/6, work done
Rear of 3, Cleveland Street	Permitting the occupation of a condemned house	Defendant fined 20/-, and costs, £1 8s.
18 to 24, Derry Street	Non-compliance with Statutory Notice, re—Dilapidated sinks, premises insufficiently drained, drainage unventilated, and gully being broken, ashpits being open and foul	Order made for the work to be done in 14 days, defendant to pay costs, £1 10s. 6d.
103, North Street	Continuing to occupy a condemned house	Defendant fined £5 and costs, or two months' imprisonment